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**Results of the
1982 NACUBO
Comparative Performance Study
and
Investment Questionnaire**

The NACUBO Investments Committee hereby conveys its thanks to the many persons who made this study possible. These include: the business officers who voluntarily supplied data and answered the questionnaire; Bruce Dresner, who serves so capably as survey coordinator; and Dartmouth College, which provides the use of its computer.

Investments Committee 1982-83

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RESULTS OF THE 1982 NACUBO
COMPARATIVE PERFORMANCE STUDY
AND
INVESTMENT QUESTIONNAIRE

by

Bruce M. Dresner
Survey Coordinator

Under the Direction of
the NACUBO Investments Committee

NATIONAL ASSOCIATION OF COLLEGE AND UNIVERSITY BUSINESS OFFICERS
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PREFACE

The purpose of the annual NACUBO Comparative Performance Study (CPS) is to aid administrators in evaluating the performance of their investment pools.

The CPS was begun in 1971 as an expansion of a survey conducted in prior years by Dartmouth College. Although the study originally gathered information only on performance, it now includes an investment questionnaire which provides additional pertinent information relating to endowment funds and their management.

The 1982 study contains two parts: Section I--comparative performance information and related investment performance statistics, and Section II--other endowment statistics.

Throughout the study all performance figures are computed using annual data supplied by participating institutions. The theory behind the methodology for the investment pool comparative performance computations is described in Appendix I. Performance calculations are explained in detail in Appendix II. Performance information received from investment services or produced internally may vary from results in this report if such figures are based on other than annual data or computed in a different manner. While it is believed the results can be viewed with considerable validity, a very deviant response or an exceptional outcome should be treated with caution.

Appendix III is a glossary of terms and definitions which participants were asked to keep in mind to permit consistency of responses and which the reader may find as a helpful reference.

The confidential nature of participant responses to investment performance questions has been maintained through use of code numbers. However, selected nonperformance data have been identified by institution in the belief that this information is most useful when so identified.

Inquiries pertaining to the content of this report or to the methodology for the investment pool comparative performance computations should be addressed to Bruce M. Dresner, NACUBO Survey Coordinator, P.O. Box 31, Hanover, New Hampshire 03755, (603) 646-2445. Additional copies of this report are available through the NACUBO office at \$30 per copy for members, \$50 for nonmembers. (Orders must be prepaid.) A Summary Comparative Performance Study is available at \$5 per copy (minimum order \$10).

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RESULTS OF THE 1982 NACUBO COMPARATIVE PERFORMANCE STUDY
AND INVESTMENT QUESTIONNAIRE

SECTION I -- INVESTMENT PERFORMANCE

INTRODUCTION

Participants

The 1982 NACUBO Comparative Performance Study (CPS) contains information as of June 30, 1982, on 218 college and university investment pools.* Institutions participating in the study have endowment and life income funds of approximately \$17.5 billion at market value. The total for all U.S. college and university endowment funds was about \$23.5 billion, according to the most recent (1981) HEGIS data (one year's difference between NACUBO and HEGIS data).

The institutions in the NACUBO survey are categorized by size as follows:

Table 1

Participating Institutions
(in millions of dollars)

<u>Endowment Size</u>	<u>Number Reporting</u>	<u>Life Income Funds</u>	<u>Endowment Funds</u>	<u>Total</u>
\$100 million and over	37	\$443	\$12,472	\$12,915
\$50 to \$100 million	26	70	1,905	1,975
\$10 to \$50 million	95	101	2,324	2,425
Under \$10 million	36	8	179	187
TOTAL	<u>194</u>	<u>\$622</u>	<u>\$16,880</u>	<u>\$17,502</u>

A list of participating institutions ranked by order of endowment size is provided as Table 3, page 3, of this report. As a further helpful reference, an alphabetical listing of institutions participating in the CPS is also provided as Exhibit I, page 73.

Exhibit II, page 75, contains a coded listing as of June 30, 1982, of characteristics of the pools.

*The terms "endowment" pool and "investment pool" are not synonymous. All of an institution's endowment funds may not be contained in its investment pool(s). Investment pools might include--besides true, quasi, and term endowment--other funds retained in the endowment and similar funds group, such as life income funds, loan funds, and temporarily invested plant funds.

Investment Objectives

Of the 218 investment pools, 88 (40%) follow a total return investment philosophy, 117 (54%) follow a balanced investment philosophy, and 13 (6%) follow an income-oriented philosophy. These three objectives are defined as follows:

Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held because primary emphasis is on long-term overall return.

Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed-income securities.

Income-Oriented - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current maximization.

For performance comparison purposes the latter groups have been combined. Nine pools changed their investment objective during the year. Three of these changed from balanced to total return, three from total return to balanced, two from balanced to income, and one from income-oriented to total return.

Size of Investment Pools

For performance comparison purposes the investment pools have been categorized by size as follows:

Table 2

Investment Pools by Size

<u>Size of Pools</u>	<u>1974 Number</u>	<u>1982 Number</u>	<u>Approximate Value of Pools at June 30, 1982 in Thousands</u>
Over \$50 million	33	61	\$12,458,359
\$10 to \$50 million	43	100	2,453,233
Under \$10 million	71	57	257,292
TOTAL	147	218	\$15,168,884

From 1974 to 1982, the size of the investment pools participating in the Comparative Performance Study has increased. In 1974, 49% of the pools in the study were under \$10 million, while in 1982 only 26% were in that category. Correspondingly, the \$10 million to \$50 million group increased from 29% to 46%, and the over \$50 million group increased from 22% to 28%.

Pool Characteristics

In terms of characteristics, 171 of the pools were described as pooled endowment funds consisting principally of endowment and similar funds. Sixteen were described as combinations of more than one separately invested fund; 11 as pools consisting of only those assets over which management has discretion; 14 as separately invested funds which have been unitized to enable performance to be accurately measured; and 6 as pooled life income funds.

Pool Composition

Of the 218 pools, 158 contained true and quasi-endowment funds, 29 contained only true endowment funds, and 3 contained only quasi-endowment funds. The 28 remaining pools included not only endowment funds but also investments of other fund groups.

Validity of CPS Data

Because NACUBO is dealing with a wealth of data, errors in compiling results may occur. Numerous checks have been incorporated over the years to keep errors to a minimum. However, if the data supplied NACUBO (unit value and income-per-unit figures) are erroneous, the probability is that only very deviant figures will be spotted. Except for obviously erroneous and deviant figures, all data provided are treated as correct. Although each institution is responsible for the accuracy of its data, it is felt that a high degree of reliability can be placed on the raw data supplied. Unit values and income-per-unit figures for over 75% of the pools in the NACUBO CPS are contained in independently audited financial reports, and over 90% are reported in the institution's annual report.

Table 3

Endowment and Life Income Fund Assets
Ranked by Endowment Market Value at June 30, 1982
(000 omitted)

<u>Institution</u>	<u>Life Income Funds</u>	<u>Endowment Funds</u>
1 Harvard University	\$40,111	\$1,711,310
2 The University of Texas System	3,778	1,626,210 (A)
3 Princeton University	6,655	885,772
4 Columbia University	4,898	772,562
5 Yale University	6,200	740,600
6 Stanford University	89,703	680,621 (A)
7 Massachusetts Institute of Technology	9,587	466,977
8 University of Chicago	11,000	394,200
9 Rice University	10,364	333,487
10 Northwestern University	15,599	322,286 (A)

<u>Institution</u>	<u>Life Income Funds</u>	<u>Endowment Funds</u>
11 Cornell University	23,384	317,592
12 New York University	1,730	308,500 (A)
13 Washington University	6,039	302,200
14 Rockefeller University	325	240,563
15 Dartmouth College	19,297	230,071
16 Johns Hopkins University	4,718	223,994
17 University of Pennsylvania	8,154	218,250
18 University of Notre Dame	3,611	203,767
19 California Institute of Technology	26,260	192,426 (S)
20 Vanderbilt University	25,418	183,889
21 University of Southern California	21,546	182,925
22 University of Virginia	272	154,228
23 Duke University	7,244	151,381
24 McGill University	0	147,700 (M)
25 Case Western Reserve University	10,016	141,222
26 Wellesley College	9,030	126,224
27 Smith College	0	125,150
28 Carnegie-Mellon University	5,553	124,176
29 Wesleyan College	749	121,964
30 Brown University	5,786	121,041
31 University of Delaware	620	119,168
32 University of Michigan	5,977	115,309
33 Southern Methodist University	0	110,368 (M)
34 University of Cincinnati	4,154	103,421
35 Baylor University	14,549	101,639 (M)
36 Vassar College	8,887	98,370
37 University of Pittsburgh	286	98,262
38 Oberlin College	0	95,924
39 Loyola University	191	95,059
40 Amherst College	3,031	94,412
41 Rensselaer Polytechnic Institute	4,145	94,191
42 Ohio State University	793	94,165
43 Berea College	2,183	91,161
44 Wake Forest University	545	89,151
45 University of Richmond	485	86,768
46 Grinnell College	3,120	83,220
47 Georgetown University	1,459	76,479
48 Pomona College	34,790	72,765
49 Brandeis University	4,443	71,931
50 Lehigh University	4,948	70,905
51 Tulane University	6,343	67,679
52 Middlebury College	1,720	66,383
53 Lafayette College	2,357	65,142
54 Thomas Jefferson University	567	60,149
55 Carleton College	2,607	60,035
56 State University of New York	26	59,758 (Mr)
57 Rochester Institute of Technology	1,066	58,622
58 Mount Holyoke College	3,027	58,382
59 Syracuse University	8,304	56,012
60 Saint Louis University	1,096	55,572
61 Boston University	1,537	55,064
62 University of Miami	5,824	51,818 (M)
63 Rutgers, The State University of New Jersey	0	49,404
64 Occidental College	9,491	49,226
65 Bryn Mawr College	0	48,977 (M)

Institution	Life Income Funds	Endowment Funds
66 University of Wisconsin System	0	47,040
67 Earlham College	570	46,299
68 Baylor College of Medicine	0	44,491
69 Trinity College (Connecticut)	670	44,373
70 Academy of the New Church	0	44,186
71 Cooper Union	154	43,890
72 Bucknell University	845	42,994
73 Worcester Polytechnic Institute	955	42,694
74 University of Missouri	1,172	42,108
75 Kansas University Endowment Association	3,642	41,873
76 Colgate University	7,856	41,415 (M)
77 University of North Carolina (Chapel Hill)	646	41,377
78 Hamilton College	1,876	39,544
79 Southwestern University	176	37,853
80 Southwestern at Memphis	2,310	37,409
81 Radcliffe College	1,018	37,220
82 Hampton Institute	0	36,031
83 Haverford College	917	35,773
84 Colorado College	0	34,720
85 Agnes Scott College	0	34,627
86 Willamette University	1,643	34,118 (M)
87 Drew University	0	33,860
88 University of Santa Clara	3,288	32,168
89 University of Houston System	0	31,952 (A)
90 Whitman College	9,726	31,598
91 Philadelphia College of Pharmacy and Science	0	30,826
92 Claremont McKenna College	11,284	30,317
93 University of Alabama System	0	29,120 (S)
94 Colby College	2,040	29,104
95 Davidson College	400	28,906
96 University of Vermont	270	27,644
97 Columbia University Teachers College	227	26,309 (A)
98 Lawrence University	0	26,150
99 Denison University	3,477	25,567
100 University of Denver	2,507	25,351
101 Ohio University	0	25,155
102 University of Tennessee (Knoxville)	9,638	24,616
103 Simmons College	0	24,448
104 Berry College	34	24,012
105 College of Wooster	0	23,912
106 Howard University	0	23,059
107 Spelman College	0	22,721
108 Bates College	1,215	22,200
109 George Washington University	0	21,187
110 Marquette University	61	21,031
111 Rhode Island School of Design	56	20,670
112 University of Utah	466	20,404
113 Ohio Wesleyan University	1,799	20,363
114 Sweet Briar College	0	19,932
115 University of Maryland	0	19,501
116 Pennsylvania State University	0	18,848
117 Cornell College	0	18,665

<u>Institution</u>	<u>Life Income Funds</u>	<u>Endowment Funds</u>
118 Auburn University	0	18,511 (S)
119 Saint Mary's College (Indiana)	0	18,357
120 Mercer University	316	18,208
121 North Carolina State University	0	17,957
122 Hendrix College	1,488	17,879 (J)
123 Dickinson College	1,252	17,855
124 University of Puget Sound	1,713	17,815 (A)
125 Furman University	2,152	17,711 (M)
126 Birmingham Southern College	0	17,615
127 Knox College	503	17,573
128 University of Tulsa	81	17,495 (M)
129 University of Arizona	0	16,986
130 Franklin & Marshall College	2,752	16,825
131 Endowment Association of College of William and Mary	274	16,634
132 Wheaton College	484	16,381
133 Michigan State University	72	16,305
134 Pratt Institute	0	16,130 (A)
135 Alma College	145	15,771
136 Reed College	2,339	15,220
137 Wittenberg University	5,356	15,199
138 American University of Beirut	14	15,183
139 Clark University	1,534	15,128
140 Oregon State Board of Higher Education	0	14,901
141 Baldwin-Wallace College	820	14,750
142 Kalamazoo College	1,041	14,579
143 Indiana University	991	14,076
144 University of Nevada System	517	13,746
145 Wentworth Institute of Technology	0	13,695
146 Connecticut College	0	13,130 (M)
147 Allegheny College	539	12,495
148 Temple University	0	12,187
149 Drake University	168	11,523 (M)
150 University of Maine	0	11,307
151 University of Tennessee (Chattanooga)	0	11,279
152 University of Dayton	0	11,132
153 Norwich University	119	10,941
154 Washburn College	0	10,560 (D)
155 Clarkson College	346	10,475
156 University of Iowa Foundation	3,377	10,246
157 Muhlenberg College	0	10,199
158 St. Norbert College	0	9,698
159 Bryant College of Business Administration	0	9,280 (J)
160 Wells College	182	8,943
161 Babson College	173	8,468
162 Skidmore College	849	8,094
163 University of Arkansas (Fayetteville)	244	7,938
164 Alfred University	118	7,905
165 Doane College	354	7,820
166 Ohio Northern University	0	7,646 (A)
167 College of William and Mary	0	7,608
168 Rollins College	244	7,505 (M)
169 Hope College	3,186	7,460

<u>Institution</u>		<u>Life Income Funds</u>	<u>Endowment Funds</u>
170	Moravian College	148	6,869
171	University of Scranton	0	6,411 (M)
172	Rockhurst College	143	6,392
173	University of Nebraska	0	6,366
174	University of Akron	416	5,956
175	University of Evansville	65	5,864
176	Washington State University	47	5,787
177	Otterbein College	307	5,065
178	Medical College of Pennsylvania	292	4,601
179	Kenyon College	475	4,318
180	Russell Sage College	1,604	3,840
181	Chapman College	633	3,554 (M)
182	Canisius College	94	3,482
183	Philadelphia College of Textiles and Science	0	3,478
184	Western Michigan University	867	2,680
185	Trinity College (D.C.)	100	2,635
186	Arizona State University	456	2,352
187	University of Massachusetts	0	2,238
188	University of Tampa	71	2,222
189	Monmouth College	0	2,218
190	Newberry College	0	2,124
191	Eastern Michigan University	44	1,881
192	University of Connecticut	0	1,717
193	University of Mississippi	0	1,713
194	Ocean County College	0	738
TOTAL		\$626,041	\$16,892,635

NOTE: (A) Figures are as of August 31, 1982
 (D) Figures are as of December 31, 1982
 (J) Figures are as of July 31, 1982
 (M) Figures are as of May 31, 1982
 (Mr) Figures are as of March 31, 1982
 (S) Figures are as of September 30, 1982

PERFORMANCE

How Did Endowment Pools Do in 1981-82?

The purpose of the NACUBO Comparative Performance Study is to aid administrators in evaluating their endowment pool's investment performance. Measuring comparative performance among pools with similar characteristics, objectives, and risk levels is useful in understanding the investment results achieved with respect to desired goals.

- o For the year ending June 30, 1982, the 218 participating college and university pools had an average rate of return of -0.9%. This rate is better than the -1.8% average rate of return earned by a composite of the S&P 500 Index, the Lehman Brothers-Kuhn Loeb Bond Index, and the average treasury bill rate using the same asset composition as the average investment pool (52.4% equities, 28.0% bonds, 13.8% cash and equivalents, 2.7% real estate, and 3.1% other assets).
- o The study also shows that for the three-year period ending June 30, 1982, the 8.3% average rate of return of the college and university pools exceeded the 6.0% rate of the composite market index.
- o For the five-year period ending June 30, 1982, the 7.7% average return of the endowment pools was higher than the 5.7% rate of the composite index.
- o Endowment pools underperformed inflation as measured by the Consumer Price Index ("CPI") and the Higher Education Price Index ("HEPI")* for the one-, three-, five-, and ten-year periods ended June 30, 1982.
- o The total return earned on stocks in fiscal 1982, as measured by the S&P 500's -11.8%, was lower than the return from bonds: 7.4% for the Salomon Brothers Bond Index of high-quality, long-term bonds and 9.0% for the broader-based Lehman Brothers-Kuhn Loeb Bond Index. However, stocks performed best over the three, five, and ten years. Consequently, endowment pools which were more heavily stock-oriented, those with a total return investment objective, and larger endowment pools generally performed poorly in fiscal 1982 and better over the longer periods measured.
- o In terms of investment objectives, those pools with a "total-rate-of-return" objective underperformed those with "balanced" and "income" objectives in fiscal 1982. The opposite proved the case for the three- and five-year periods ended June 30, 1982. The total-rate-of-return pools on average were 61% invested in equities over the past five years, while the balanced pools were only 50% invested in equities.

*HEPI measures average changes in prices of goods and services purchased by colleges and universities through current fund educational and general expenditures.

- o The study reveals that, on average, the larger pools (over \$50 million) underperformed the middle pools (\$10-\$50 million), which underperformed the smallest pools (under \$10 million) during the past year, but the reverse was the case for the three-, five-, and ten-year periods measured. For the last five years, the groups had average equity positions of 59%, 55%, and 47% for the largest, middle, and smallest sized pools, respectively.
- o Those investment pools which were managed during the year ended June 30, 1982, after adjusting for their respective asset compositions, performed about two percentage points poorer than those pools managed internally. In 1981 and 1980, externally managed pools averaged about two percentage points better than those managed internally. In 1979 results were about equal, and in 1978 and 1977 the internally managed pools outperformed those managed externally.
- o Of the 29 internally managed pools, the 10 pools over \$50 million in size performed almost 2 percentage points better than the 19 under \$50 million after adjusting for respective asset composition.
- o Investment pools where bonds were more actively managed in fiscal 1982 (i.e., those having higher bond turnover percentage rates) underperformed, on average, those pools having lower turnover rates. Pools with the highest equity turnover performed better than those pools with the lowest turnover.
- o Investment pool assets continued to shift from equities, an occurrence which has taken place every year since NACUBO began collecting such data in 1974. Pool assets also continued to shift toward bonds. This has happened in every year except 1977, when bond positions remained stable.
- o Since NACUBO began gathering college and university data in 1974, endowment pools, as represented by the newly established NACUBO Endowment Performance Index ("NEPI"), have produced total returns in excess of those of the stock and bond market indexes.

To provide a better understanding of how an institution might interpret its investment pool performance, the performance for the average investment pool is presented in Table 4 for the one-, three-, five-, and ten-year periods ending June 30, 1982. Also shown is performance based on investment objective and relative size.

Table 4

Average Total Return Performance for Periods
Ended June 30, 1982

	<u>One Year</u>	<u>Three Years</u>	<u>Five Years</u>	<u>Ten Years</u>
All Investment Pools Measured	-0.93%	8.31%	7.70%	5.21%
By Investment Objective:				
Total Return Pools	-2.17	9.29	8.62	5.07
Balanced or Income Pools	-0.10	7.62	7.07	5.31
By Size:				
Over \$50 million	-1.63	9.05	8.46	5.54
\$10 to \$50 million	-1.20	8.49	7.92	5.18
Under \$10 million	0.28	7.10	6.41	4.83
Comparative Indexes:				
Dow Jones Industrial Average	-11.70	4.88	3.45	3.70
S&P 500 Index	-11.76	7.68	7.19	4.79
Salomon Brothers Bond Index	7.43	-3.85	-1.23	2.76
Lehman Brothers-Kuhn Loeb Bond Index	9.04	-1.18	0.64	N/A
Other Benchmarks:				
The Common Fund for Equity Investments	-13.25	11.31	12.72	5.35
The Common Fund for Bond Investments	10.98	0.10	2.30	N/A
Inflation Benchmarks:				
Consumer Price Index	7.08	10.25	9.68	8.51
Higher Education Price Index	9.92	9.88	8.81	7.80

While one year is too short a period from which to draw any significant conclusions regarding performance, for the year ended June 30, 1982, 209 (96%) of the 218 pools in the CPS outperformed the Dow Jones Industrial Average. This widely followed benchmark should not be the sole measure used when comparing the performance of the average endowment investment pool. A better measure, but one still not completely representative for comparative purposes, is the S&P 500 Index. Ninety-six percent of the 218 pools also outperformed the S&P 500 Index in 1981-82, which was a period of declining stock prices. This is not surprising since most endowment pools maintain a balanced investment mix and are not totally invested in stocks. Virtually all of the endowment investment pools underperformed both the Salomon Brothers Bond Index and the Lehman Brothers-Kuhn Loeb Bond Index. This, too, is not surprising, as the large stock component of funds probably hurt performance. For those few pools totally invested in either common stocks or long-term bonds, a direct comparison to the S&P 500 Index or either bond index, respectively, is more valid.

Table 5

Investment Pools Which Outperformed the Popular Indexes
for Periods Ended June 30, 1982

<u>Period Ended June 30, 1982</u>	<u>Dow Jones Industrial Average</u>	<u>S&P 500 Index</u>	<u>Salomon Brothers Bond Index</u>	<u>Lehman Kuhn Loeb Index</u>
<u>One Year</u>				
Number of Pools Measured	218	218	218	218
Number Outperforming Index	209	209	22	14
Percent	96%	96%	10%	6%
<u>Three Years</u>				
Number of Pools Measured	210	210	210	210
Number Outperforming Index	185	118	209	209
Percent	88%	56%	100%	100%
<u>Five Years</u>				
Number of Pools Measured	195	195	195	195
Number Outperforming Index	189	109	194	194
Percent	97%	56%	99%	99%
<u>Ten Years</u>				
Number of Pools Measured	150	150	150	N/A
Number Outperforming Index	119	77	137	N/A
Percent	19%	51%	91%	N/A

Bond Indexes

In years prior to 1981, the NACUBO CPS cited the Salomon Brothers Index as an appropriate comparative "bogey" for the fixed-income portion of investment pools. Because of increased volatility in the bond market and a greater emphasis on active bond management, more and more money managers use the broader Lehman Brothers-Kuhn Loeb Bond Index to evaluate the performance of fixed-income assets. The 1982 CPS, like the 1981 CPS, uses the Lehman Index for this purpose. The composition of the Salomon and Lehman indexes is as follows:

THE SALOMON BROTHERS HIGH-GRADE LONG-TERM CORPORATE BOND INDEX is composed of all publicly issued, fixed-rate, nonconvertible domestic debt of the three major corporate classifications: industrial, utility, and financial. Bonds included have a quality rating of AAA-AA by Standard & Poor's. Only bonds with a minimum outstanding principal amount of \$25,000,000 and a minimum maturity of 12 years are included. The index has a maturity of 25 years.

THE LEHMAN BROTHERS-KUHN LOEB CORPORATE BOND INDEX is composed of all publicly issued, fixed-rate, nonconvertible domestic debt of the three major corporate classifications: industrial, utility, and financial. Bonds included have a rating of at least Baa by Moody's Investors Service, BBB by Standard & Poor's Corporation, or, in the case of bank bonds not rated by either Moody's or Standard & Poor's, BBB by Fitch Investors Service. Only bonds with a minimum maturity of one year are included. All pass-through issues are excluded.

Some may consider the above summary incomplete in that it does not take into account important considerations concerning a specific investment pool, such as the pool's objective (which might be quite different from that of either the stock or bond indexes), its risk posture (which in most instances is below that of the stock market but above the bond market), and other policy constraints which have been placed on the pool.

The 1976 CPS marked the first time NACUBO attempted to evaluate investment pool performance on a "risk-adjusted" basis. For fiscal 1978, it was noted that on a risk-adjusted basis, significant value was added to endowment performance by investment management. In 1979, results were consistent with what might be expected. In 1981, as in 1980, results showed that significant value was added above what might be expected. In 1982, incremental value was also added, and while relative performance was satisfactory, absolute performance of endowment was a disappointment.

It is also helpful to view performance in the context of the distribution of the investment pool returns. Graph I (page 14) shows the performance distribution for all investment pools.

In Exhibit III (page 83), the total return for each pool is listed, along with the relative ranking of each pool for the one-, three-, five-, and ten-year periods ending June 30, 1982.

What should be of interest and concern to trustees and those administrators responsible for an investment pool is the return achieved from a blend of market indexes that mimics their own pool. In the case of the average pool, this means the return achieved as a result of the investment of its 52.4% stock component, 28.0% bond component, 13.8% cash component, 2.7% real estate component, and 3.1% miscellaneous assets component. (This is the third year NACUBO requested information regarding the real estate component of endowment pools, which previously was reported as part of miscellaneous assets.) On this basis, the one-year return of -0.93% for all investment pools appears 85 basis points more favorable when compared with the return of -1.78% which might be expected based on the asset components of the pool shown in Table 6.

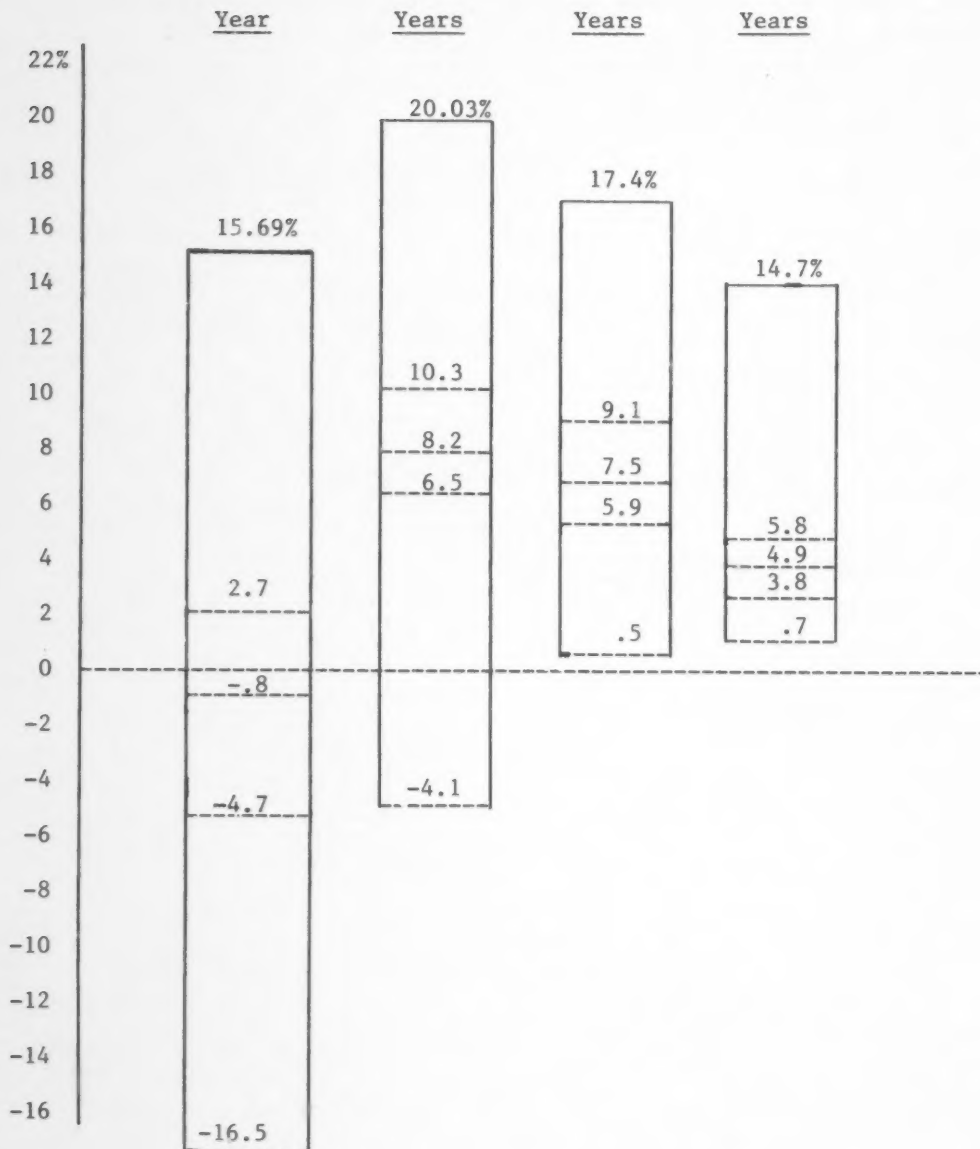
Table 6

Estimated Asset Component Return of All Investment Pools for the
One-Year Period Ending June 30, 1982

<u>Asset Component</u>	<u>Index</u>	<u>Fiscal 1981-82 Total Return Percent</u>	<u>Average Investment Pool Asset Component</u>	<u>Expected Total Return</u>
Stocks	S&P 500	-11.76%	52.4%	-6.16%
Bonds	Lehman-Kuhn Loeb	9.04	28.0	2.53
Cash	Avg. Treas. Bill	13.41	13.8	1.85
Real Estate	N/A	0	2.7	0
Miscellaneous	N/A	0	3.1	0
TOTAL			<u>100.0%</u>	<u>-1.78%</u>

GRAPH I

Quartile Performance Distribution
Of All Investment Pools*
For Periods Ended June 30, 1982



*C99's total return performance result for the ten-year period was 21.63%. It is excluded from the above graph as was the case in the 1981 CPS. This institution has followed a nonconventional investment policy.

Table 7 shows an analysis of the components which make up total return.

Table 7

Total Return and Component Performance for the
One-Year Period Ended June 30, 1982

	<u>Appreciation Change In Market Value</u>	<u>Yield (Income Return)*</u>	<u>Total Return</u>
Average Investment Pool	-8.76%	7.83%	-0.93%
Dow Jones Industrial Average	-16.89	5.19	-11.70
S&P 500 Index	-16.48	4.72	-11.76
Salomon Brothers Bond Index	-5.51	12.94	7.43
Lehman Brothers-Kuhn Loeb Bond Index	-1.79	10.83	9.04
Average One-Year Treasury Bill Rate	0	13.41	13.41

*Assumes reinvestment of income based on the average of the beginning and ending year market values (see Appendix II, page 144).

Table 8 indicates the yield (income return) to be expected from various types of assets. The 7.35% expected yield using the asset component analysis is close to the actual yield of 7.83% of the average pool shown in Table 7. The return would have been closer if some assumption had been made regarding real estate and miscellaneous assets. Assuming a 5% yield for these assets, which represent 5.8% of total assets, the expected yield would have been 7.64%.

Table 8

Yield Performance for the One-Year Period Ending June 30, 1982

<u>Asset Component</u>	<u>Index</u>	<u>Fiscal 1981-82 Yield</u>	<u>Average Investment Pool Asset Component</u>	<u>Expected Yield</u>
Stocks	S&P 500	4.72%	52.4%	2.47%
Bonds	Lehman-Kuhn Loeb	10.83	28.0	3.03
Cash	Avg. Treas. Bill	13.41	13.8	1.85
Real Estate	N/A	0	2.7	0
Miscellaneous	N/A	0	3.1	0
TOTAL			<u>100.0%</u>	<u>7.35%</u>

Performance Summary

The average total return of the endowment investment pools is somewhat better (85 basis points or 0.85% higher return) than what might be expected based on the asset components of the funds (-0.93% actual return compared to -1.78% expected). This could be for a number of reasons. Perhaps assuming no return at all on 5.8% of the assets (real estate and miscellaneous) is unduly understating expected performance. If a 10% return were assumed for these assets, the favorable spread of actual results to expected results would be reduced to 27 basis points. Perhaps the S&P 500, the Lehman Brothers-Kuhn Loeb Index, and the average treasury bill are not representative of the type of stocks, bonds, and short-term investment vehicles used by colleges and universities. For example, perhaps the stocks held have different capitalizations and performance than those in the S&P 500, which is heavily weighted toward large capitalized stocks. Perhaps the bonds held were of different quality and maturity than the Lehman Brothers-Kuhn Loeb Index. Perhaps the short-term cash investments were in bankers' acceptances, certificates of deposit, commercial paper, or the Common Fund for Short-Term Investments, which might have produced a greater return than the average treasury bill rate. Whatever the reason for this good performance, such a comparison does take into account important constraints, such as a fixed income-to-equity ratio, placed on the manager by the institution's trustees. Therefore, it appears some value was added by management. But for performance results to be meaningful, longer periods should be looked at.

Table 9 shows that investment management also achieved a significant average annual incremental return for the five- and three-year periods ending June 30, 1982: 1.99% and 2.31%, respectively.

Table 9

All Pools

Actual Returns Compared to Asset Component Returns for the Five-Year and Three-Year Periods Ending June 30, 1982

	<u>Actual Return</u>	<u>Expected Total Return</u>	<u>Difference</u>
5 Years	7.70%	5.71%	1.99%
3 Years	8.31	6.00	2.31

Endowment Total Return Performance Index

In 1982, the NACUBO Investments Committee decided to develop a NACUBO Endowment Performance Index ("NEPI"), representing the total return performance of the average endowment pool in the CPS. Because the committee first began publishing data from colleges and universities in fiscal 1974, this year was chosen to serve as the base year, setting the July 1, 1973, NEPI value at 100. The CPS year-by-year total return performance results for all endowment pools and various stock and bond indexes are shown in Table 10. The cumulative indexed results of the NEPI and comparative benchmarks (also initialized at 100 on July 1, 1973) are shown in Table 11.

Table 10

Annual Total Return Performance Figures As Reported in 1974 to 1982 CPS

<u>Fiscal Year</u>	<u>All Endowment Pools</u>	<u>Dow Jones Industrial Average</u>	<u>S&P 500 Index</u>	<u>Salomon Brothers Bond Index</u>	<u>Lehman Brothers- Kuhn Loeb Bond Index</u>
1974	-11.43%	-6.10%	-14.48%	-7.46%	7.59%
1975	12.00	14.58	15.22	14.51	14.63
1976	9.93	18.70	13.68	10.08	12.89
1977	5.07	-4.45	0.46	14.65	14.58
1978	2.49	-5.81	-0.16	-0.97	0.33
1979	10.80	9.05	13.52	6.75	6.63
1980	11.90	9.45	17.05	-3.66	-2.16
1981	14.64	19.39	20.89	-14.11	-9.53
1982	-0.93	-11.70	-11.76	7.43	9.04

Table 11

NACUBO Endowment Performance Index ("NEPI") Showing Cumulative Total Return Performance Figures for All Endowment Pools as Reported in Annual CPS and Indexes (Initialized at 100 on July 1, 1973) through June 30, 1982

<u>Fiscal Year</u>	<u>All Endowment Pools</u>	<u>Dow Jones Industrial Average</u>	<u>S&P 500 Index</u>	<u>Salomon Brothers Bond Index</u>	<u>Lehman Brothers- Kuhn Loeb Bond Index</u>
Inception July 1,					
1973	100.00	100.00	100.00	100.00	100.00
1974	88.57	89.99	85.52	92.54	92.41
1975	99.20	107.59	98.54	105.97	105.94
1976	109.05	127.71	112.02	116.65	119.59
1977	114.58	122.03	112.53	133.74	137.02
1978	117.43	114.94	112.35	132.44	137.47
1979	130.11	125.34	127.54	141.39	146.59
1980	145.60	137.18	149.29	136.22	143.42
1981	166.91	163.77	180.48	116.99	129.74
1982	165.36	144.62	159.26	125.68	141.48

Performance by Investment Objective

As can be seen in Table 4, page 10, for the one-year period ending June 30, 1982, the major broad market index for measuring stock performance (the S&P 500 Index) shows a significantly lower total return than did the major index for measuring bond performance (the Lehman Brothers-Kuhn Loeb Bond Index). Inasmuch as the pools with total return as an investment objective were on average 57.9% invested in stocks as compared to 48.6% for the pools with a balanced objective, and had a lower average bond exposure of 22.5% versus 31.8%, one would expect the total return pools to underperform the balanced pools. This, in fact, was the case for the year ending June 30, 1982. The total return pools had a total return of -2.17% as compared to -0.10% for the balanced pools--a difference of 2.07%. Applying the asset component analysis (as in Table 6) to each group of pools, one would expect the total return pools to show a -2.92% return and balanced pools a -1.00% return, a difference of 1.92%. Table 12 shows that on a risk-adjusted basis, balanced pools appear to have performed slightly better than total return pools, by 15 basis points. Both total return and balanced pools exceed expected returns by 75 and 90 basis points, respectively.

Table 12

Actual Returns Compared to Expected Total Returns
for the One-Year Period Ending June 30, 1982

	<u>Actual Return</u>	<u>Expected Total Return*</u>	<u>Difference</u>
Total Return Pools	-2.17%	-2.92%	6.48%
Balanced or Income Pools	-0.10	-1.00	0.90
Difference	2.07%	1.92%	0.15%

*Calculated the same as in Table 6.

Over the three-year and five-year periods, as shown in Table 13, total return pools outperformed balanced pools on a nominal basis and in conformance with expected returns. The actual returns of both groups were greater than expected by a wide margin. No calculations can be made for the ten-year period because sufficient data on investment pool asset component percentages are not available.

Table 13

Total Return Pool and Balanced Pool
Actual Returns Compared to Expected Total Returns
for the Five-Year and Three-Year Periods Ended June 30, 1982

<u>5-Year Period</u>	<u>Actual Return</u>	<u>Expected Total Return*</u>	<u>Difference</u>
Total Return Pools	8.62%	6.03%	2.59%
Balanced or Income Pools	7.07	5.12	1.95
Difference	1.55%	0.91%	0.64%
<u>3-Year Period</u>			
Total Return Pools	9.29%	6.34%	2.95%
Balanced or Income Pools	7.62	5.12	2.50
Difference	1.67%	1.22%	0.45%

*Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Performance by Size

For the one-year period ended June 30, 1982, the relative performance of the under-\$10 million group was better than that of the \$10-\$50 million group, which was better than that of the over-\$50 million group. The over-\$50 million group performed best for the three-, five-, and ten-year periods. This group was followed by the \$10-\$50 million group.

Table 14 shows that, for the one-year period, all three groups performed equally well, based on asset components. For the three- and five-year periods, the over-\$50 million group outperformed the \$10-\$50 million group. Both larger-sized groups outperformed the under-\$10 million group for these longer periods. Actual returns for all groups were greater than expected returns in all periods.

Table 14

Actual Returns Compared to Expected Total Returns by Endowment Size
for the Five-Year and Three-Year Periods Ending June 30, 1982

<u>5-Year Period</u>	<u>Actual Return</u>	<u>Expected Total Return*</u>	<u>Difference</u>
Over \$50 million	8.46%	5.79%	2.67%
\$10 to \$50 million	7.92	5.53	2.39
Under \$10 million	6.41	5.01	1.40
 <u>3-Year Period</u>			
Over \$50 million	9.05%	6.00%	3.05%
\$10 million to \$50 million	8.49	5.69	2.80
Under \$10 million	7.10	4.98	2.12
 <u>1-Year Period</u>			
Over \$50 million	-1.63%	-2.52%	0.89%
\$10 to \$50 million	-1.20	-2.03	0.83
Under \$10 million	0.28	-0.63	0.91

*Calculated the same as in Table 6 for each year, and results compounded on an average annual basis.

Performance Based on Equity Weightings

Because investment performance is heavily influenced by a pool's exposure to stocks, bonds, and other investment media, the 1982 CPS includes performance rankings based on three equity percentage classifications: those pools 65% or more in equities, those 50% to 65% in equities, and those under 50% in equities. Each investment pool's total return performance ranking, grouped by average beginning and ending year percentage in equities, is shown in Exhibit III. Table 15 shows the one-, three-, five-, and ten-year performance of each group and the respective average 1982 equity position of the median investment pool.

Table 15

Average Total Return Performance
Based on Average Percentage in Equities

Average Percentage In Equities	1982 Number Of Pools	1982 Median Equity %	Period Ended June 30, 1982			
			One- Year	Three- Year	Five- Year	Ten- Year
65% or more	52	72%	-5.80%	8.89%	8.46%	5.66%
50 - 65%	89	57	-1.15	8.67	7.94	5.14
Under 50%	77	38	2.60	7.49	6.94	4.99
All Pools	218	55	-0.93	8.31	7.70	5.21

A word of caution on Table 15: to the extent a significant number of investment pools were in a different equity category grouping in years prior to fiscal 1982, the performance figures for the three-, five-, and ten-year periods could be misleading. The one-year results, however, are clear; as expected, the greater the equity exposure the worse the results.

This same caveat applies if prior to 1982 a pool changed investment objective or fell into a different size category grouping.

Keeping Pace with Inflation

Another important consideration when evaluating an investment pool's performance is its ability to keep pace with inflation. Two benchmarks are included in the 1982 CPS, the Consumer Price Index ("CPI") and the Higher Education Price Index ("HEPI"). The one-, three-, five-, and ten-year compound increases for each index are shown in Table 4. For all periods, overall investment pool performance trailed these two indexes.

Internal Investment Management Performance

Of the 218 investment pools in the 1982 CPS, 29 are managed internally. The size of these pools is shown in Table 16.

Table 16

Internal Investment Management
(by Size)

<u>Pool Size (Market Value)</u>	<u>Number in Each Group</u>
Greater than \$100 million	9
\$50 million to \$100 million	1
\$25 to \$50 million	4
\$10 to \$25 million	7
\$5 to \$10 million	3
Under \$5 million	5
TOTAL	29

The one-year total return for the 29 pools managed internally was 1.02%, better than the -1.23% for the 182 pools managed externally. Year-by-year total return results since NACUBO began gathering these data are shown in Table 17.

Table 17

Fiscal Year Total Return Investment Performance
for Internally and Externally Managed Pools from 1977 to 1982

	<u>Internally Managed</u>	<u>Externally Managed</u>
1982	1.02%	-1.23%
1981	12.46	14.97
1980	9.80	12.39
1979	10.83	10.79
1978	3.66	2.28
1977	6.05	4.88

The 1982 average asset components of internally and externally managed pools are shown in Table 18. Because of their lower equity positions, it would be expected that internally managed pools would perform better in 1982. Based on their respective asset components, both groups performed better than might be expected--internal pools by 104 basis points (1.02% actual less -0.02% expected) and external pools by 82 basis points (-1.23% actual less -2.05% expected).

Table 18

Average Asset Composition of Internally and Externally
Managed Investment Pools for Fiscal 1982

	<u>Internally Managed</u>	<u>Externally Managed</u>
Stocks	43.4%	53.9%
Bonds	28.5	27.9
Cash	19.0	13.1
Real Estate	5.2	2.3
Miscellaneous	3.9	2.9
TOTAL	<u>100.0%</u>	<u>100.0%</u>

A one-year review of the performance of the 10 largest internally managed pools, those over \$50 million, showed a return of 0.18% compared to 1.47% for the 19 pools under \$50 million in size. Based on their respective asset composition (as shown in Table 19), the larger pools performed 214 basis points above what might be expected (0.18% actual less -1.96% expected), and the smaller pools 42 basis points (1.47% actual less 1.05% expected) above.

Table 19

Average Asset Composition of Largest and Smallest
Internally Managed Investment Pools for Fiscal 1982

	<u>Over \$50 Million</u>	<u>Under \$50 Million</u>
Stocks	54.1%	37.9%
Bonds	22.6	31.5
Cash	17.5	19.8
Real Estate	3.9	5.9
Miscellaneous	<u>1.9</u>	<u>4.9</u>
TOTAL	100.0%	100.0%

ASSET COMPOSITION

Summary

Table 20 shows the asset composition of the investment pools as of June 30, 1982. On the average, 48.1% of the assets of pooled funds was invested in stocks and 30.6% in bonds. As one would expect, the pools with a total return investment objective were more heavily invested in stocks (53.2%) than were balanced fund pools (44.4%). It can also be seen that the larger-sized pools had greater amounts invested in stocks than did the smaller pools.

Table 20

Asset Composition of Pools by Size and Type
at June 30, 1982

	<u>By Investment Objective</u>			<u>By Size</u>		
	<u>All Pools</u>	<u>Total Return</u>	<u>Balanced</u>	<u>Over \$50 Million</u>	<u>\$10 to \$50 Million</u>	<u>Under \$10 Million</u>
Stocks	48.1%	53.2%	44.4%	50.3%	48.7%	44.2%
Bonds	30.6	25.0	34.5	28.8	28.4	36.5
Cash	15.4	15.9	15.1	13.7	15.8	16.6
Real Estate	2.7	1.9	3.3	2.8	3.4	1.5
Miscellaneous	<u>3.2</u>	<u>4.0</u>	<u>2.7</u>	<u>4.4</u>	<u>3.7</u>	<u>1.2</u>
TOTAL	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

For the most recent five years, 1978 through 1982, the average asset composition by size and investment type is shown in Table 21.

Table 21

Average Asset Composition of Pools by Size and Type
From Fiscal 1978 to Fiscal 1982

<u>Pools over \$50 Million</u>	<u>Stocks</u>	<u>Bonds</u>	<u>Cash</u>	<u>Real Estate</u>	<u>Misc.</u>	<u>Total</u>
1982	55.1%	25.6%	12.3%	2.8%	4.2%	100.0%
1981	60.2	23.0	11.3	2.7	2.8	100.0
1980	57.5	25.3	12.0	2.0	3.2	100.0
1979	59.9	25.5	11.4	N/A	3.2	100.0
1978	60.2	26.3	10.0	N/A	4.5	100.0
3-Year Average	57.6	24.6	11.9	N/C	N/C	100.0
5-Year Average	58.6	25.1	11.4	N/C	N/C	100.0
<u>Pools \$10 to \$50 Million</u>						
1982	53.3	25.9	14.2	3.3	3.4	100.0
1981	55.9	25.4	12.6	2.8	3.3	100.0
1980	54.0	26.3	13.4	2.4	3.9	100.0
1979	54.1	27.2	14.3	N/A	4.4	100.0
1978	56.6	28.5	10.4	N/A	4.5	100.0
3-Year Average	54.4	25.9	13.4	N/C	N/C	100.0
5-Year Average	54.8	26.7	13.0	N/C	N/C	100.0
<u>Pools under \$10 Million</u>						
1982	48.4	34.1	14.8	1.5	1.3	100.0
1981	49.1	33.0	16.0	0.6	1.3	100.0
1980	42.4	35.9	19.3	0.2	2.2	100.0
1979	43.8	38.4	15.7	N/A	2.1	100.0
1978	51.9	35.2	11.1	N/A	1.8	100.0
3-Year Average	46.6	34.3	16.7	N/C	N/C	100.0
5-Year Average	47.1	35.3	15.4	N/C	N/C	100.0
<u>Total Return Pools</u>						
1982	57.9	22.5	13.9	1.8	3.9	100.0
1981	62.1	20.8	13.0	1.3	2.8	100.0
1980	58.1	22.8	15.5	1.2	2.4	100.0
1979	60.0	22.5	14.9	N/A	2.6	100.0
1978	64.3	23.0	9.9	N/A	2.8	100.0
3-Year Average	59.4	22.0	14.1	N/C	N/C	100.0
5-Year Average	60.5	22.3	13.4	N/C	N/C	100.0
<u>Balanced or Income Pools</u>						
1982	48.6	31.8	13.8	3.3	2.5	100.0
1981	51.1	30.6	13.1	2.7	2.5	100.0
1980	47.5	32.7	14.1	2.0	3.7	100.0
1979	48.6	34.1	13.6	N/A	3.7	100.0
1978	51.6	34.0	10.7	N/A	3.7	100.0
3-Year Average	49.1	31.7	13.7	N/C	N/C	100.0
5-Year Average	49.5	32.6	13.1	N/C	N/C	100.0

N/A - Not Available
N/C - Not Calculated

Shifts in Investments

The net change in asset composition over the year results from a combination of two factors. The first is a change in stock, bond, and other asset prices; the second is a shift in investments. Tables 22 through 24 show the estimated shift in investments made by management decisions for all pools and for pools grouped by size and investment objective. To the June 30, 1981, asset composition figures is applied the change in market price of each type of investment to arrive at projected asset composition figures for June 30, 1982. The actual composition amounts are then subtracted from the projected amounts to arrive at the net change caused by shifts in investments. The decrease of 16.48% in the market price of the S&P 500 Index is used to arrive at the projected stock figure, while the decrease of 1.79% in market price of the Lehman Brothers-Kuhn Loeb Broad Based Bond Index is used to arrive at the projected bond figure.* The projections assume no market price change for cash, real estate, or miscellaneous assets. While these computations do not provide a precise measurement of shifts in investments, they do provide estimates which can be studied.

Table 22

Change in Asset Composition Caused by Shifts in Investments -- All Pools

	<u>June 30, 1981</u>		<u>June 30, 1982</u>	
	<u>Actual</u>	<u>Predicted</u>	<u>Actual</u>	<u>Difference</u>
Stocks	56.7%	52.5%	48.1%	-4.4%
Bonds	25.3	27.6	30.6	3.0
Cash	12.3	13.6	15.4	1.8
Real Estate	2.7	3.0	2.7	-0.3
Miscellaneous	<u>3.0</u>	<u>3.3</u>	<u>3.2</u>	-0.1
TOTAL	100.0%	100.0%	100.0%	

Table 23

Change in Asset Composition Caused by Shifts in Investments All Pools 1974-1982

Percentage Change -- Year Ended June 30

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Total</u>
Stocks	-4.0%	-1.2%	-2.2%	-1.1%	-4.8%	-3.3%	-2.3%	-2.0%	-4.4%	-25.3%
Bonds	1.3	3.9	4.2	0	0.6	1.3	2.6	2.4	3.0	19.3
Cash	3.0	-2.9	-1.7	1.0	4.2	1.9	-0.6	-0.7	1.8	6.0
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.4	0.2	-0.3	0.3
Miscellaneous	-0.3	0.2	-0.3	0.1	0	0.1	-0.1	0.1	-0.1	-0.3

*In years prior to 1981, the Salomon Brothers High-Grade, Long-Term Bond Index was used.

Table 24

Change in Asset Composition Caused by Shifts in Investments
by Size and Type

Percentage Change -- 1974 through 1982

<u>Total Return</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Total</u>
Stocks	-5.1%	-0.5%	-3.7%	-0.2%	-6.2%	-4.2%	-1.5%	-0.8%	-5.3%	-27.5%
Bonds	0.1	2.6	5.8	0.2	1.7	1.5	1.0	2.2	3.1	18.2
Cash	5.0	-2.7	-1.4	0.5	4.6	1.8	0.7	-1.3	2.4	9.6
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.3	0.1	-0.1	0.3
Miscellaneous	0	0.6	-0.7	-0.5	-0.1	0.9	-0.5	-0.2	-0.1	-0.6
<u>Balanced</u>										
Stocks	-3.5	-1.9	-1.4	-1.4	-4.1	-2.8	-3.0	-2.3	-4.2	-24.6
Bonds	2.0	4.7	3.3	-0.2	0	0.9	3.9	2.3	3.1	20.0
Cash	1.9	-2.8	-1.4	1.3	4.1	2.0	-1.4	-0.3	1.3	4.3
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.1	-0.3	0.3
Miscellaneous	-0.4	0	-0.1	0.3	0	-0.1	0	0.2	-0.1	0
<u>Over \$50 Million</u>										
Stocks	-4.5	-1.9	-1.3	-0.5	-1.5	-1.8	-2.9	-2.6	-5.5	-22.5
Bonds	-0.1	5.1	1.3	-0.9	-1.1	1.2	3.1	2.0	4.3	14.9
Cash	4.7	-3.4	-1.4	1.7	2.7	0.7	-0.7	-0.1	1.7	5.9
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.7	0.5	0.3	0.9
Miscellaneous	-0.1	0.2	1.4	-0.3	-0.1	-0.1	-0.2	0.2	-0.2	0.8
<u>\$10 to \$50 Million</u>										
Stocks	-3.5	-2.9	-1.6	-0.9	-6.3	-2.6	-2.7	-2.7	-4.7	-26.8
Bonds	0.5	4.3	4.3	-0.9	1.7	0.7	2.4	2.4	2.8	17.9
Cash	3.6	-2.1	-1.4	1.5	4.8	1.3	0.1	0.1	1.8	9.8
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0.2	0.2	-0.2	0.5
Miscellaneous	-0.6	0.7	-1.3	0.3	-0.2	0.6	0	0	0.3	-1.4
<u>Under \$10 Million</u>										
Stocks	-4.2	0.2	-3.4	-1.7	-5.1	-5.2	0.3	0.3	-4.1	-26.0
Bonds	2.1	2.9	5.7	1.6	0.4	1.7	2.4	2.4	2.4	22.0
Cash	2.2	-3.0	-1.8	0.2	4.7	3.5	-2.7	-2.7	2.2	3.5
Real Estate	N/A	N/A	N/A	N/A	N/A	N/A	0	0	-0.2	0
Miscellaneous	-0.1	-0.1	-0.5	-0.1	0	0	0	0	-0.3	0.5

Shifts in Investments from 1974 through 1982

Since 1974, when NACUBO began gathering data on shifts in investments, endowment investment pools have been continuously decreasing their exposure to stocks, as shown in Table 23. Conversely, pools have increased their bond exposure every year, except for 1977 when it appeared that no shift in bonds occurred. In retrospect, as shown in Table 25, this generally proved unfavorable. In all years except 1974, 1977, and 1982, stocks outperformed bonds. In regard to shifting cash, endowment investment pools would have been best served if cash had been increased in 1974, 1978, and 1982; and this was in fact the case.

Table 25

Yearly Total Return for One-Year Treasuries, the Salomon Brothers Index, and the S&P 500

<u>Fiscal Year</u>	<u>Average One- Year Treasuries</u>	<u>Salomon Brothers Bond Index</u>	<u>S&P 500 Index</u>
1982	13.41%	7.43%	-11.76%
1981	12.98	-14.11	20.86
1980	11.42	-3.66	17.13
1979	9.85	6.75	13.47
1978	6.49	-0.97	-0.16
1977	5.57	14.65	0.46
1976	6.54	10.08	13.81
1975	7.48	14.51	15.22
1974	8.03	-7.46	-14.48

Distribution of Asset Composition

Table 26 shows the asset composition distribution for all pools by investment objective and size.

Table 26

Distribution of Asset Composition as of June 30, 1982

	<u>By Objective</u>			<u>By Size</u>		
	<u>All Pools</u>	<u>Total Return</u>	<u>Income or Balanced</u>	<u>Over \$50 Million</u>	<u>\$10 to \$50 Million</u>	<u>Under \$10 Million</u>
<u>Percentage Invested in Stocks</u>						
90-100%	1	0	1	0	0	1
80-90%	2	2	0	1	1	0
70-80%	18	11	7	4	13	1
60-70%	34	15	19	9	18	7
50-60%	57	26	31	24	18	15
40-50%	41	21	20	90	19	13
30-40%	28	6	22	8	13	7
0-30%	37	7	30	6	18	13
TOTAL	<u>218</u>	<u>88</u>	<u>130</u>	<u>61</u>	<u>100</u>	<u>57</u>
<u>Percentage Invested in Bonds</u>						
90-100%	1	0	1	0	0	1
80-90%	0	0	0	0	0	0
70-80%	2	0	2	0	1	1
60-70%	5	0	5	3	0	2
50-60%	9	1	8	2	5	2
40-50%	34	10	24	4	15	15
30-40%	57	19	38	17	21	19
20-30%	58	26	32	16	30	12
10-20%	41	24	17	17	22	2
0-10%	11	8	3	2	6	3
TOTAL	<u>218</u>	<u>88</u>	<u>130</u>	<u>61</u>	<u>100</u>	<u>57</u>

Asset Diversification

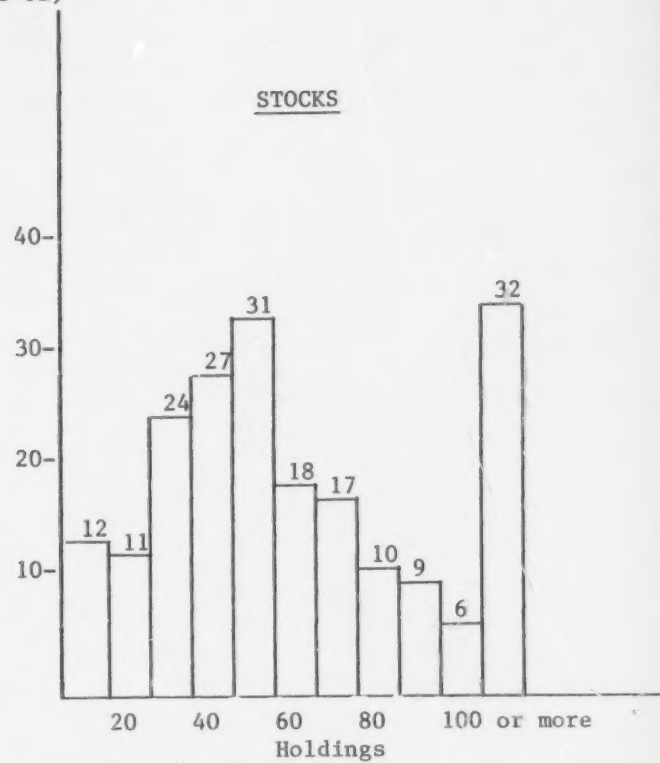
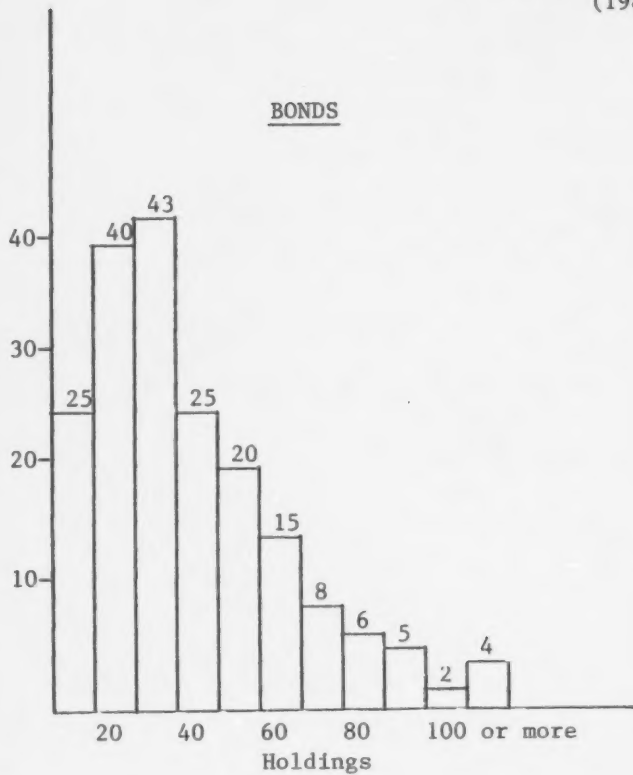
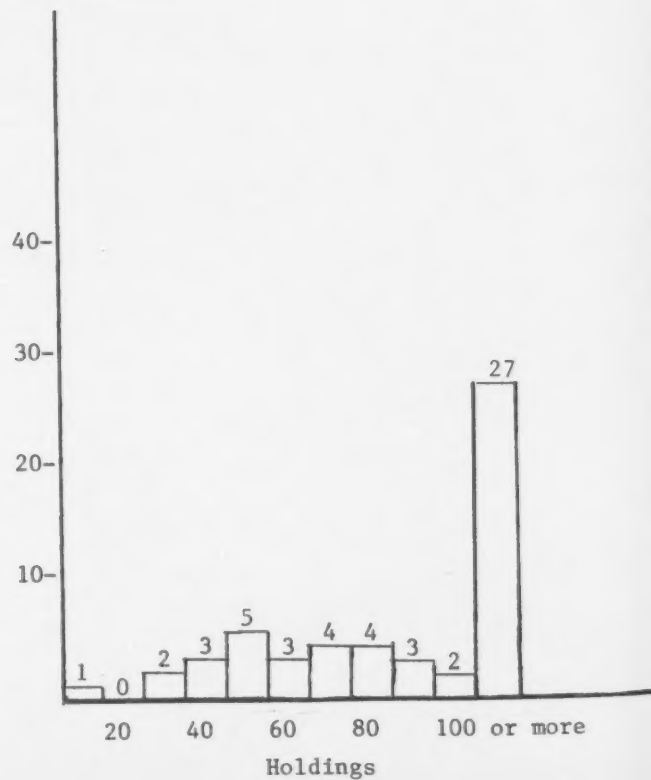
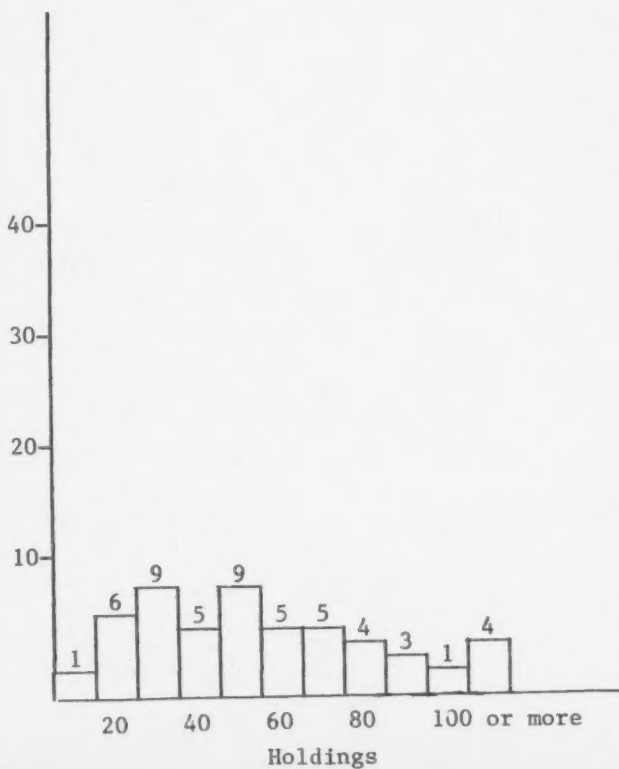
In general, investment pools tended to hold more positions in stocks than bonds. As shown in Table 27, the smaller groups had a lower ratio of the number of stocks to bonds. Also, total return pools tended to have stock positions (53 holdings) about twice their bond positions (25 holdings), and balanced pools tended to have stock positions about one and one-half times their stock positions.

The total distribution of bond and stock positions for all pools and for the different size categories is portrayed in Graph II on pages 30 and 31.

Table 27

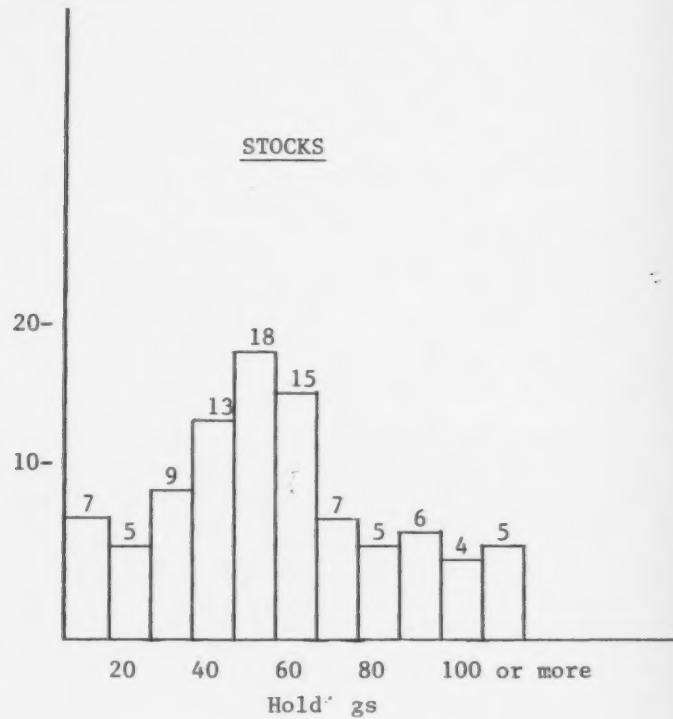
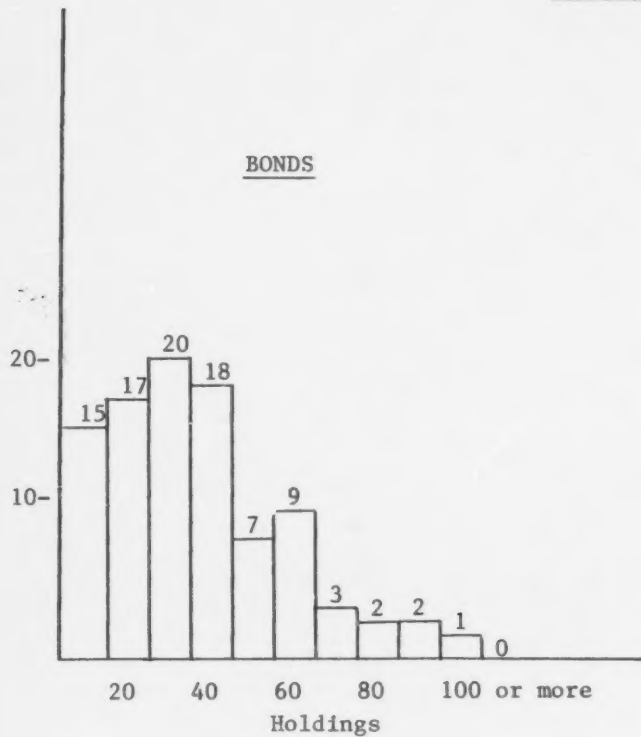
Asset Diversification for Bonds and Stocks as of
June 30, 1982

	Median Number of <u>Bonds Held</u>	Median Number of <u>Stocks Held</u>
All Pools	28	49
By Investment Objective:		
Total Return	25	53
Balanced	32	47
By Size:		
Over \$50 million	45	103
\$10 to 50 million	29	49
Under \$10 million	19	31

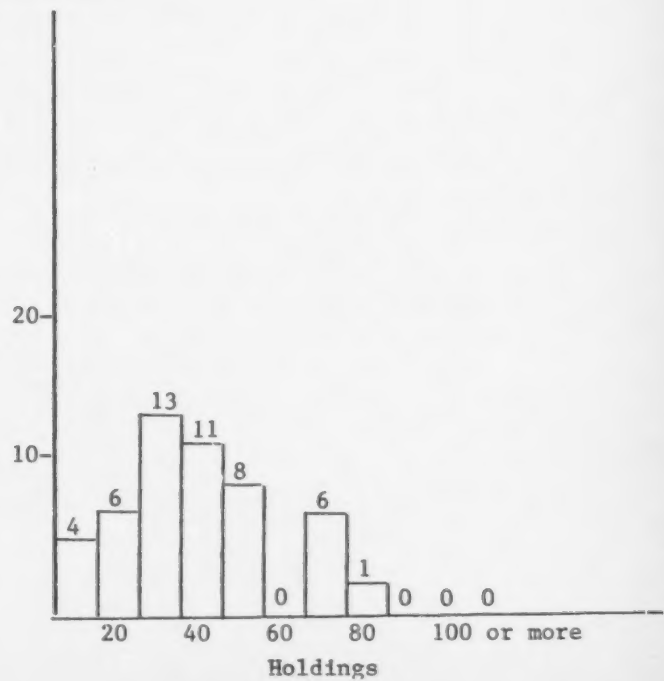
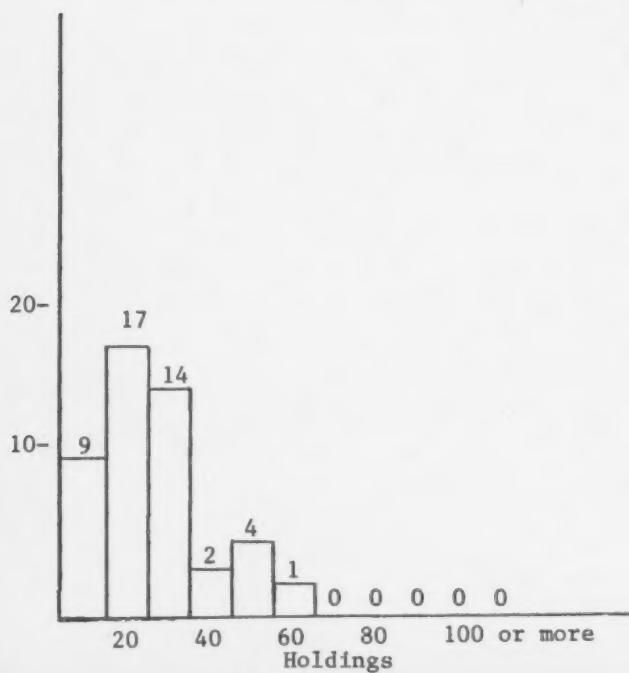
GRAPH IIAsset Diversification
(1981-82)OVER \$50 MILLION

GRAPH II
(Cont.)

Asset Diversification
\$10-\$50 Million



Under \$10 Million



Equity Price-Earnings Ratio - "P/E"

Institutions were asked on an optional basis to provide the price earnings ratio (P/E) for the equity portion of their investment pools as of June 30, 1982. The average P/E for 44 pools was 9.3 compared to 9.5 for the Dow Jones and 7.7 for the S&P 500.

Noncontrollable Assets

Noncontrollable assets are those which, although included in investment pools, are not truly marketable or are not included in pools solely on their investment merit, e.g., investment in a dormitory, investment letter stock, donor-restricted stock, etc.

Of the 218 pools, 178 (82%) had noncontrollable assets of 5% or less, 22 had noncontrollable assets of between 5% and 15%, 12 had noncontrollable assets of between 15% and 25%, and 6 had noncontrollable assets of greater than 25%. Noncontrollable assets for all pools represented 2.9% of the total assets of the pools as of June 30, 1982.

RISK MEASUREMENT AND RETURN

Description

There presently remains considerable controversy as to whether superior investment managers do exist and hence can produce an incremental return relative to the amount of risk taken, or whether the only way above-average long-run return can be achieved is by assuming greater risks. Risk is defined as a greater variability in return. A particular risk measure now widely used is an index of relative volatility, which is also known by the Greek letter "beta." The beta calculation of risk is essentially a comparison between the movements of returns from the market as a whole.*

Volatility as a measurement of risk was introduced into the Comparative Performance Study in 1975 and has been included since then. In calculating such statistical measures, reliability is higher when information is gathered over a long period. Although more accuracy would be achieved by using quarterly data, the data used in this study provide reasonably reliable results if there is adequate diversification of investment pool assets, and the asset composition return is similar to what might be expected. That is, stocks are more risky than bonds, and bonds are more risky than treasury bills. Correspondingly, in up-markets, stocks should do better and treasury bills worse; and in down-markets, just the opposite should occur.

In a regression analysis, an investment pool's beta measure is the percentage fluctuation that can be expected and therefore predicted based on the performance of the stock market. Generally, the S&P 500 Index is used as the market base. A beta of 1 means that a pool should move in unison with the market. If the market goes up 10%, the pool should go up 10%. A beta of more than 1, say 1.10, means the pool is 10% more volatile. When the market goes up, a more volatile pool should perform

*Managing Risk in an Uncertain Era, Malkiel & Firstenberg, Princeton University Press, 1976.

better than the market; it should perform worse when the market goes down. On the other hand, a pool that is less volatile (lower beta) should not perform as well in an up-market and should not lose as much in a down-market. Any change in value will vary from that predicted by the beta measure if, and to the extent that, a pool is not thoroughly diversified and therefore exhibits distinct, unique characteristics not correlated to the market in general.

Observations

Table 28 shows beta coefficients calculated for the investment pools in this year's CPS and in previous years. College and university endowment funds appear to be invested for less volatility and risk than the market as a whole. One would expect their performance to be below that of the stock market as a whole in a period of a rising market, as was the case in fiscal 1975, 1976, 1979, 1980, and 1981, and above the stock market in a period of declining market, as was the case in fiscal 1977, 1978, and 1982. As shown in Table 29, total return pools are more volatile (greater beta) than balanced pools, and the larger the size of pools, the more volatile. This seems logical since total return pools and larger pools have greater stock components, and stocks have historically been more volatile than bonds.

Table 28

Comparative Performance Study Historic Beta of All Investment Pools

<u>10 Years Ending June 30</u>	<u>10-Year Beta</u>
1975	.69
1976	.72
1977	.71
1978	.73
1979	.72
1980	.70
1981	.72
1982	.61

Table 29

Beta Coefficients

	Ten Years Ended June 30, 1982
By Investment Objective:	
Total Return Pools	.69
Balanced Pools	.56
By Size:	
Over \$50 million	.68
\$10 to \$50 million	.62
Under \$10 million	.52
Comparative Indexes:	
Dow Jones Industrial Average	.84
Salomon Brothers Bond Index	-.04
S&P 500	1.00

Beta and Predictive Performance

The average portfolio beta of endowment pools can be used as a predictive tool to estimate the future performance of the endowment pool universe. Using the .61 ten-year beta of the average endowment pool in the 1982 CPS, the -11.76% one-year return of the S&P 500 as a representative proxy of the market, and the 13.41% average treasury bill return as a risk-free rate of return, the expected return for endowment pools in fiscal 1982 was -1.94%. This is described by the following equation:

$$1982 \text{ expected return} = 1982 \text{ risk-free rate} + \left[\begin{array}{l} \text{beta} \\ \text{of all} \\ \text{pools} \end{array} \times \left[\begin{array}{l} (1982 \text{ market} \\ \text{return} \\ - \\ 1982 \text{ risk-free} \\ \text{rate}) \end{array} \right] \right]$$

$$-1.94\% = 13.41\% + 0.61 \times (-11.76\% - 13.41\%)$$

The actual -0.93% return for all pools (see Table 4) is 101 basis points better than the expected -1.94% return. This latter figure is not very different from the -1.78% asset component estimated return described in Table 6. Differences between actual and expected returns could be portrayed as the value added by management.

STOCK AND BOND TURNOVERMethod of Calculation

Turnover, as reported in this study, is determined by dividing the lesser of stock purchases or sales by the average of the beginning and ending year market values of stocks. For example, a portfolio with \$80 million in stocks at June 30, 1981, and \$100 million at June 30, 1982, that purchased during the year \$25 million in stocks and sold \$18 million would have had a turnover of 20% -- \$18 million in sales divided by \$90 million. This same methodology is used for bond turnover.

1982 Stock Turnover

For all institutions, 1982 stock turnover of 28.0% remained at its highest level since NACUBO began gathering this data in 1974-75, as shown in Table 30. This is also the case when pools are grouped by investment objective or by size. In 1982, and in seven of the last eight years, turnover for total return pools has been greater than for balanced pools. Based on size, the smallest group had the least equity turnover in 1982 and also in six of the last seven years.

1982 Bond Turnover

This is only the fifth year NACUBO has been gathering data on bond turnover. For both 1978 and 1979, turnover of balanced pools was about twice the turnover of total return pools. In 1980 the reverse was the case: turnover of total return pools was twice that of balanced pools. In 1981 the turnover of both was equal, and in 1982 the turnover of total return pools was again greater. The larger the size group of pools, generally, the greater the turnover. This has proved a consistent pattern for all five years for the largest sized group. Pools over \$50 million in size had about two times the turnover of pools between \$10 and \$50 million in size, and pools between \$10 and \$50 million had greater turnover than pools under \$10 million--except in 1981 and in 1982, when the turnover of these two groups was about equal.

Table 30

	<u>Stock Turnover</u>								1980-81 Number Responding
	1974- 1975	1975- 1976	1976- 1977	1977- 1978	1978- 1979	1979- 1980	1980- 1981	1981- 1982	
All Pools	17.0%	16.1%	15.1%	14.3%	18.0%	21.7%	28.0%	28.0%	176
By Investment Objective:									
Total Return Pools	17.4	16.1	15.1	17.0	24.3	28.0	38.0	42.1	70
Balanced Pools	16.5	15.8	16.1	13.5	16.4	20.0	23.9	23.0	106
By Size:									
Over \$50 million	19.7	15.4	15.0	15.3	20.5	26.4	28.5	33.0	45
\$10 to \$50 million	17.0	15.5	20.8	17.0	19.0	22.3	30.0	30.0	86
Under \$10 million	14.4	18.0	11.4	12.0	15.8	18.0	23.9	22.2	45
	<u>Bond Turnover</u>								
All Pools				13.7	15.5	15.0	15.8	19.6	171
By Investment Objective:									
Total Return Pools				9.6	18.5	26.4	15.8	27.4	66
Balanced Pools				20.0	33.8	12.5	15.8	18.0	105
By Size:									
Over \$50 million				28.4	48.8	26.0	20.4	34.9	43
\$10 to \$50 million				12.4	13.0	14.0	13.0	18.9	84
Under \$10 million				7.7	10.9	10.6	14.8	16.5	44

Stock and Bond Turnover and Performance Implications

For 1982, the 25 pools with the highest stock turnover ratios outperformed those with the lowest ratios. In the prior year, the pools with the 25 highest and lowest turnover ratios had identical performance of 15.2%. In the five previous years, the highest turnover pools were the best performers. The 25 pools with the highest bond turnover underperformed the 25 pools with the lowest turnover by almost 2 percentage points. This year's and prior years' findings are shown in Table 31. The 1982 results of the 25 pools with the highest and lowest stock and bond turnover are shown in Tables 32 and 33, respectively.

Table 31

Performance Comparison of the 25 Pools with the Highest
and Lowest Stock and Bond Turnover Percentages

Stock Pools

	<u>25 Highest</u>	<u>25 Lowest</u>	<u>Basis Point Difference</u>
1982	-1.33%	-3.03%	170
1981	15.26	15.26	0
1980	12.90	10.38	252
1979	11.23	10.16	107
1978	3.71	1.69	202
1977	4.60	3.29	131
1976	9.84	8.26	158

Bond Pools

1982	-2.00	-0.13	-183
1981	12.45	10.70	175
1980	11.22	9.20	201
1979	10.47	8.21	226
1978	2.34	2.55	-21

Table 32

Pools with the Highest and Lowest Equity Turnover Percentage*
for the One-Year Period Ending June 30, 1982,
Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1982 Turnover Percent	1982 Average Total Return	Rank	Code Name	1982 Turnover Percent	1982 Average Total Return
1	COM-FD BD		10.98%	1	COM-FD BD		10.98%
2	C30	82.0%	10.70	2	C81	0.3%	9.75
3	LEH-KUHN		9.04	3	E58	1.0	9.60
4	SALOMON		7.43	4	LEH-KUHN		9.04
5	C99	82.5	7.32	5	SALOMON		7.43
6	C50	106.1	3.02	6	E20	9.0	2.68
7	E64	68.0	2.30	7	C62	4.4	2.58
8	C21	98.7	2.23	8	C15	4.6	1.36
9	E41	89.0	1.77	9	C55	3.2	1.05
10	E27	89.9	1.10	10	E98	8.6	0.98
11	C43	67.6	0.67	11	C1	9.0	0.31
12	E70	71.0	0.52	12	E74	8.0	0.05
13	C57	90.0	-0.81	13	C33	4.4	-0.60
14	E47	62.7	-1.22	14	C3	2.9	-0.86
15	E66	118.6	-1.24	15	E44	0	-1.24
16	C29	80.0	-1.30	16	E42	7.3	-1.32
17	C39	98.3	-1.52	17	C16	2.0	-1.38
18	C96	67.2	-1.52	18	C79	8.3	-1.62
19	E99	74.0	-2.45	19	E14	9.0	-4.33
20	E69	77.7	-3.00	20	E79	0	-5.26
21	C14	121.0	-3.74	21	E21	1.0	-7.24
22	C76	100.5	-4.01	22	C4	4.4	-8.62
23	C2	92.0	-4.38	23	E12	8.8	-8.97
24	E81	87.3	-4.72	24	E3	5.2	-10.64
25	C42	99.0	-5.50	25	E101	7.6	-10.85
26	C66	72.0	-6.28	26	D-JONES		-11.70
27	C98	66.7	-7.28	27	SP 500		-11.76
28	D-JONES		-11.70	28	C77	4.1	-12.40
29	SP 500		-11.76	29	SP-IND		-12.64
30	SP-IND		-12.64	30	COM-FD EQ		-13.25
31	COM-FD EQ		-13.25	31	E26	8.2	-14.05
32	C27	75.7	-13.81	32	E112	3.5	-14.72
Arithmetic Average of 25 Pools				Arithmetic Average of 25 Pools			
		85.5%	-1.33%			5.0%	-3.03%

*NOTE: All pools included in this analysis had an equity component of at least 35%.

Table 33

Pools with the Highest and Lowest Bond Turnover Percentage*
for the One-Year Period Ending June 30, 1982,
Ranked According to Average Total Return

Highest Turnover				Lowest Turnover			
Rank	Code Name	1982 Turnover Percent	1982 Average Total Return	Rank	Code Name	1982 Turnover Percent	1982 Average Total Return
1	C6	132.6%	13.16%	1	C69	0%	15.69%
2	COM-FD BD		10.98	2	C59	0.4	15.22
3	LEH-KUHL		9.04	3	COM-FD BD		10.98
4	SALOMON		7.43	4	LEH-KUHN		9.04
5	E110	75.0	5.16	5	SALOMON		7.43
6	E84	356.0	3.80	6	C38	0	5.04
7	C54	198.0	2.56	7	C10	0	4.98
8	E9	141.3	1.83	8	C61	0.7	4.63
9	E27	71.8	1.10	9	C88	0	4.43
10	C103	149.8	-0.15	10	E113	1.0	3.62
11	E31	92.7	-0.47	11	C19	1.0	2.46
12	E57	354.0	-0.57	12	C95	0	1.40
13	E73	123.8	-0.79	13	E98	0	0.98
14	E47	200.0	-1.22	14	C73	0	0.70
15	E2	71.4	-1.24	15	E70	0	0.52
16	C29	90.0	-1.30	16	E74	1.0	0.05
17	C39	187.5	-1.52	17	C91	0	-0.65
18	E55	111.0	-3.48	18	C41	0	-0.87
19	E17	91.0	-3.65	19	C47	0	-0.95
20	E77	170.2	-4.91	20	E39	0.6	-1.20
21	E45	79.5	-5.69	21	C23	0	-1.75
22	E108	100.0	-5.70	22	C32	0	-2.66
23	C66	151.0	-6.28	23	E79	0	-5.26
24	E76	169.0	-7.37	24	E107	0	-7.37
25	E38	180.0	-7.70	25	C4	0.2	-8.62
26	C87	116.0	-7.96	26	E12	0	-8.97
27	C102	149.8	-8.68	27	C48	0	-10.02
28	C25	315.0	-9.03	28	D-JONES		-11.70
29	D-JONES		-11.70	29	SP 500		-11.76
30	SP 500		-11.76	30	SP-IND		-12.64
31	SP-IND		-12.64	31	COM-FD EQ		-13.25
32	COM-FD EQ		-13.25	32	E75	0.1	-14.53
Arithmetic Average of 25 Pools				Arithmetic Average of 25 Pools			
		155.0%	-2.00%			0.2%	-0.13%

*NOTE: All pools included in this analysis had a bond component of at least 20%.

INVESTMENT ADVISORY FEES AND DISCRETIONInvestment Fees

The median fee as a percentage of average market value for 183 responding institutions as shown in Table 34 was 0.30% and the average was 0.33%. (This represents over 95% of the 189 pools which use outside advisors; 29 pools are managed internally.) For those managers who have discretion and those who do not have discretion, economies of scale do seem to come into play as there is a differentiation in fees among the largest, middle-sized, and smallest pools.

Investment Discretion

Of 183 institutions, 16% indicated that they do not give their advisor discretion, and 84% indicated that they do give discretion. The results in Table 34 are consistent with those of prior studies, in that those institutions which do not give discretion pay less than those which do. Table 35 shows the range of investment pool advisory fee responses.

Table 34

Advisory Fees Paid in 1981-82 as a Percentage of Average
Market Value, in Terms of Investment Discretion

	<u>Number of Institutions</u>	<u>Arithmetic Average</u>	<u>Median Response</u>
<u>Give Discretion</u>			
Over \$50 million	44	.31	.30
\$10 to \$50 million	68	.35	.32
Under \$10 million	41	.39	.38
Subtotal	<u>153</u>	<u>.35</u>	<u>.32</u>
<u>Do Not Give Discretion</u>			
Over \$50 million	5	.17	.15
\$10 to \$50 million	19	.23	.24
Under \$10 million	6	.39	.42
Subtotal	<u>30</u>	<u>.25</u>	<u>.26</u>
TOTAL	<u>183</u>	<u>.33</u>	<u>.30</u>

Table 35

Range of Responses of Investment Pool Advisory
Fees Paid as a Percentage of Average Market Value in 1981-82

<u>Investment Pools with Manager Discretion</u> (in millions)							
	<u>Under \$5</u>	<u>\$5-\$10</u>	<u>\$10-\$25</u>	<u>\$25-\$50</u>	<u>\$50-\$100</u>	<u>Over \$100</u>	<u>All Pools</u>
Less than .10%	0	0	0	1	0	0	1
.10 to .15%	0	0	0	0	0	1	1
.15 to .20%	2	3	7	7	2	7	28
.20 to .25%	4	0	7	3	3	3	20
.25 to .30%	2	4	7	1	3	4	21
.30 to .35%	3	1	6	2	4	5	21
.35 to .40%	1	3	5	1	2	1	13
.40 to .45%	3	3	3	3	2	1	15
.45 to .50%	2	1	3	1	5	0	12
.50 to .60%	2	2	4	1	0	0	9
.60 to .70%	1	2	3	0	1	0	7
More than .70%	<u>1</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>5</u>
TOTAL	21	20	45	23	22	22	153

<u>Investment Pools Without Manager Discretion</u>							
Less than .10%	0	0	1	2	1	0	4
.10 to .15%	0	0	0	0	0	2	2
.15 to .20%	0	0	1	4	0	0	5
.20 to .25%	0	0	2	1	1	0	4
.25 to .30%	1	0	3	2	1	0	7
.30 to .35%	1	0	0	1	0	0	2
.35 to .40%	0	0	1	0	0	0	1
.40 to .45%	3	1	0	0	0	0	4
.45 to .50%	0	0	0	1	0	0	1
.50 to .60%	0	0	0	0	0	0	0
.60 to .70%	0	0	0	0	0	0	0
More than .70%	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	5	1	8	11	3	2	30

<u>All Pools</u>							
Less than .10%	0	0	1	3	1	0	5
.10 to .15%	0	0	0	0	0	3	3
.15 to .20%	2	3	8	11	2	7	33
.20 to .25%	4	0	9	4	4	3	24
.25 to .30%	3	4	10	3	4	4	28
.30 to .35%	4	1	6	3	4	5	23
.35 to .40%	1	3	6	1	2	1	14
.40 to .45%	6	4	3	3	2	1	19
.45 to .50%	2	1	3	2	5	0	13
.50 to .60%	2	2	4	1	0	0	9
.60 to .70%	1	2	3	0	1	0	7
More than .70%	<u>1</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>5</u>
TOTAL	26	21	53	34	25	24	183

SECTION II -- ENDOWMENT CHARACTERISTICS

INTRODUCTION

As part of the ongoing Comparative Performance Study, NACUBO has built a data base of information concerning endowment funds and characteristics. Section II of this report includes information concerning endowment gift giving, endowment wealth, principal and income, spending, investment and custodial matters, option writing, venture capital, and the like.

GENERAL INFORMATION

Fiscal Year

Of the 194 institutions responding, 165 (85%) have fiscal years ending June 30; the next most frequent responses were the last days of May and August with 14 and 8, respectively. Three institutions used September, two July, one March, and one December.

Endowment Distribution of Participants

The distribution of the 194 institutions reporting endowment size, inclusive of life income and similar funds, is categorized by the 78% independent and 22% public institutions in Table 36.

Table 36

1982 Survey Participants Endowment Size Distribution of 192 Independent and Public Institutions

	<u>Independent</u>	<u>Public</u>	<u>Total</u>	<u>Percentage of 194 Answering</u>
Greater than \$100 million	32	5	37	19%
\$50 to \$100 million	23	3	26	13
\$25 to \$50 million	29	10	39	20
\$10 to \$25 million	41	15	56	29
\$5 to \$10 million	14	5	19	10
Under \$5 million	<u>9</u>	<u>8</u>	<u>17</u>	<u>9</u>
TOTAL	<u>148</u>	<u>46</u>	<u>194</u>	<u>100%</u>

It is interesting to note that the distribution by asset size of those reporting in the 1982 survey is markedly different from that of the 1974 survey as shown in Table 37. In the 1974 through 1982 surveys, the percentage of small institutions participating (those with market values under \$10 million in size at the end of each fiscal year) declined from 43% to 19%. At the same time, the number of institutions with larger endowments (those over \$50 million) increased from 22% to 32%.

Table 37

Endowment Size Percentage Distribution of the
Surveys from 1974 through 1982

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Greater than \$50 million	22%	24%	29%	32%	33%	34%	34%	37%	32%
\$10 to \$50 million	35	36	42	41	42	46	44	43	49
Under \$10 million	<u>43</u>	<u>40</u>	<u>29</u>	<u>27</u>	<u>25</u>	<u>20</u>	<u>22</u>	<u>20</u>	<u>19</u>
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number Participating	145	147	138	148	144	147	176	192	194

Life Income Funds

Life income funds are those funds the income of which does not flow through to the institution during the lifetime of the donor or beneficiary, yet the principal of which has been designated as a remainder to the institution.

In Table 3 (page 3), the dollar amount of life income funds for each institution reporting such information is indicated. The total market value at June 30, 1982, of life income funds of the 138 responding that they had such funds was \$622 million. The 1978 survey indicated that there seemed to be major practical differences among institutions in regard to both life income fund investing and financial statement reporting. Of those institutions indicating that they had such funds, about one-third combined these funds with their endowment for investment purposes and about one-half for financial reporting purposes.

To the extent that institutions for financial report purposes include life income funds with endowment funds, wealth probably is being overstated since such assets are not currently earning revenue for the support of the institution.

Funds Held in Trust by Others

Of the assets reported in Table 3, a number of institutions include funds held in trust by others when reporting. Table 38 shows an alphabetical listing of the life income and endowment assets included in Table 3 that are not held by the respective institution.

Table 38

Funds Held in Trust by Others -- Endowment and Life Income
Fund Assets as of June 30, 1982
(\$000 omitted)

<u>Institution</u>	<u>Life Income Funds</u>	<u>Endowment Funds</u>
Alma College		\$ 959
Baylor College of Medicine		1,583
Baylor University	\$ 445	8,086
Boston University		980
Brandeis University	162	1,194
Brown University		987
Bryant College	341	
Bucknell University		770
Chapman College	633	
Colgate University	2,478	
Cornell College		437
Drake University		20
Drew University		358
Franklin & Marshall College		31
Furman University	233	
Georgetown University		309
Grinnell College		665
Hope College		122
Indiana University		775
Mercer University		6,787
Middlebury College		880
Newberry College		20
Otterbein College		139
Pomona College		1,181
Rensselaer Polytechnic Institute		17
St. Louis University		485
St. Norbert College		5,735
Southern Methodist University		25,234
Southwestern at Memphis	150	23,794
Stanford University	26,814	19,227
University of Arkansas	112	
University of Chicago	1,200	
University of Cincinnati	1,933	39,268
University of Denver	557	696
University of Miami		538
University of Puget Sound	630	96
University of Richmond		5,813
University of Santa Clara		117
Vanderbilt University	5,166	
Wellesley College	769	952
Wesleyan University	518	

Non-Security Assets

One hundred and seventeen institutions reported the portion of their total endowment invested in non-security assets. Aggregate responses are shown in Table 39. The composition of such assets varies among institutions, but typically this segment of the endowment contains employee mortgages, which may be at "incentive rates" related to employment, and plant and facilities assets. The earnings from such assets are not typical, however, since they usually are set by the administration or the institution's trustees. In such instances, the return would constitute interest in the case of employee mortgages, room rent in the case of dormitories, transfer charges in the case of heating facilities, etc. The point to be made in regard to financial implications is that an institution with a heavy endowment commitment in non-security assets probably is less flexible in terms of its investment alternatives. Where non-security assets represent a large portion of the total endowment, "true wealth" may be overstated.

Table 39

Non-Security Assets as a Percentage of Total Endowment*

Non-Security Assets as a Percentage of Endowment	Over \$50 Million	\$10-\$50 Million	Under \$10 Million	Independent Institutions	Public Institutions	All Institutions
Less than 1%	11	11	3	20	5	25
1 to 2%	3	9	1	12	1	13
2 to 2.5%	2	4	0	6	0	6
2.5 to 3%	1	4	2	5	2	7
3 to 3.5%	2	1	0	1	2	3
3.5 to 5%	2	5	1	8	0	8
5 to 6.5%	4	2	0	6	0	6
6.5 to 8%	3	4	0	4	3	7
8 to 10%	4	2	1	5	2	7
10 to 12.5%	5	4	1	8	2	10
12.5 to 15%	5	2	1	6	2	8
15 to 20%	2	5	0	6	1	7
20 to 25%	0	1	2	3	0	3
Greater than 25%	<u>1</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>1</u>	<u>7</u>
TOTAL	<u>45</u>	<u>57</u>	<u>15</u>	<u>96</u>	<u>21</u>	<u>117</u>
Median Response	3.3%	3.9%	4.4%	3.3%	4.0%	3.5%

*Including life income funds.

All but six institutions indicated they carry their non-security assets at book value. Three carry their assets at appraised value, one carries certain assets at book and others at appraised value, one carries academic assets at book and other non-security assets at appraised value, and another carries such assets at the present value of future expected cash streams.

Noncontrollable Assets

Seventy-seven institutions indicated they had noncontrollable assets, as shown in Table 40. Of those reporting noncontrollable assets, those under \$10 million had the greatest amount of noncontrollable assets.

Table 40

Noncontrollable Assets as a Percentage of Total Endowment*

<u>Percentage of</u>	<u>Over \$50</u>	<u>\$10-\$50</u>	<u>Under \$10</u>	<u>Independent</u>	<u>Public</u>	<u>All</u>
<u>Endowment</u>	<u>Million</u>	<u>Million</u>	<u>Million</u>	<u>Institutions</u>	<u>Institutions</u>	<u>Institutions</u>
Less than 1%	9	18	0	24	3	27
1 to 2%	5	7	0	8	4	12
2 to 2.5%	1	3	0	3	1	4
2.5 to 3%	2	1	1	2	2	4
3 to 3.5	1	0	2	3	0	3
3.5 to 5%	3	3	1	5	2	7
5 to 6.5	2	1	2	5	0	5
6.5 to 8%	1	0	0	1	0	1
8 to 10%	0	2	1	2	1	3
10 to 12.5%	0	1	0	0	1	1
12.5 to 15%	1	1	1	3	0	3
15 to 20%	1	2	1	4	0	4
20 to 25%	0	0	1	1	0	1
Greater than 25%	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>
TOTAL	<u>26</u>	<u>40</u>	<u>11</u>	<u>63</u>	<u>14</u>	<u>77</u>
Median Response	2.2%	1.7%	7.5%	2.5%	5.4%	2.5%

*Including life income funds.

GROWTH IN ENDOWMENT

Endowment Growth and Real Growth

The decreased size of the average endowment fund in 1982 of -1.4% appears to be the result of the sharp decline in equity securities and more moderate depreciation in the bond security markets, despite new gifts added to endowment. An approximation of endowment growth can be made for the nine-year period ending June 30, 1982. This is portrayed in Table 41 as the NACUBO Endowment Wealth Index ("NEWI"). As a group, NEWI assets at

June 30, 1982, have increased almost 40% since June 30, 1973, the first year NACUBO began to gather this data. However, in real terms, taking inflation into account, endowment funds since 1973 have actually declined in purchasing power 36.96% based on the Consumer Price Index ("CPI") and about 31.63% based on the Higher Education Price Index ("HEPI"). To help put this into perspective, Table 41 compares the S&P 500 Index, the Dow Jones Industrial Average, the Salomon Brothers High-Grade Bond Index, and endowment funds both before and after inflation. The NEWI fund figures are adjusted by both the CPI and the HEPI.

Table 41

Nine-Year Appreciation Comparison of Indexes
Endowment Wealth ("NEWI") Before and After Inflation*

Fiscal Year June 30	Dow Jones	S&P 500	Salomon Brothers	NACUBO Endowment Wealth Index ("NEWI")	Real NEWI Based On CPI	Real NEWI Based On HEPI*
July 1, 1973	891.71	104.26	93.70	100.00	100.00	100.00
1974	802.41	86.00	80.53	83.30	76.49	77.48
1975	878.99	95.19	85.26	91.05	75.19	78.28
1976	1002.78	104.28	86.82	98.52	75.96	79.46
1977	916.30	100.48	92.43	102.36	74.60	77.52
1978	818.95	95.53	84.64	103.79	70.82	73.67
1979	841.98	102.91	83.15	112.09	68.94	73.80
1980	867.92	114.24	73.23	122.85	66.11	73.60
1981	976.88	131.24	56.43	139.31	68.46	76.22
1982	811.93	109.61	53.33	137.36	63.04	68.37
9-Year Percentage Change	8.95%	5.13%	-43.08%	37.36%	-36.96%	-31.63%

*Readers may note that figures for CPI have been changed retroactively to reflect new calculation bases.

**HEPI (Higher Education Price Index) figures provided by D. Kent Halstead.

The table shows that the rebound from the low 1974 equity markets through June 1981 reversed itself sharply in fiscal 1982. The bond market, as represented by the Salomon Brothers Index, is at its lowest level. Were it not for gifts to endowment, growth would be estimated to be relatively flat. Even with the strong support from gift additions, educational institutions are far from whole. That is, \$100 of endowment at July 1, 1973, would have the purchasing power at June 30, 1982, of only \$63.04 based on the CPI and \$68.37 based on the HEPI. Stated another way, the \$137.36 of endowment would have to rise approximately 60% and 45%, respectively (to \$217.89 based on the CPI or \$200.91 based on the HEPI), depending upon which index was considered more representative, to maintain 1973 purchasing power in 1982. (Table 42 compares the two indexes for the past 11 years.) This devastating loss in purchasing power is being felt through the college and university world and helps explain some of the more recent fiscal problems being experienced by many endowed institutions, especially those that rely more heavily on their endowment to meet current operating expenses. It is not surprising that many institutions have recently undertaken major fund drives to restore the purchasing power of their endowments.

Table 42

Year-to-Year Percentage Change in the
CPI and HEPI

<u>Fiscal Year</u>	<u>CPI</u>	<u>Year-to-Year Percentage Change</u>	<u>HEPI</u>	<u>Year-to-Year Percentage Change</u>
1971	100.0	5.2%	100.0	6.4%
1972	103.6	3.6	105.6	5.6
1973	107.7	4.0	111.2	5.3
1974	117.3	8.9	119.1	7.1
1975	130.4	11.2	129.2	8.6
1976	139.6	7.1	137.8	6.6
1977	147.7	5.8	146.7	6.5
1978	157.7	6.8	156.5	6.7
1979	174.9	10.9	168.7	7.8
1980	199.9	14.3	185.4	9.9
1981	218.9	9.5	203.6	9.8
1982	234.4	7.1	223.8	9.9

Fiscal 1982 Endowment

The 194 institutions reporting in the 1982 survey indicated that their total market value as of June 30, 1982, decreased approximately 1.4% in value to \$17.5 billion from June 30, 1981. This figure included some \$622 million in life income fund assets. As shown in Table 43, the increase in asset value or wealth as represented by the median institution was greater for public institutions than for independent institutions. Those institutions classified as under \$10 million in size had the greatest increase, followed by the \$10-\$50 million group, and then the over \$50 million group. This seems logical since the larger the endowment group the greater the exposure to stocks, as detailed in Section I. The "wealth" percentage is not a measure of investment performance, as it does not take into account withdrawals from, or additions to, endowment. The median yield from endowment, excluding life income funds, was slightly greater for public institutions, and the larger the endowment group the lower the reported yield. This latter observation is consistent with the lower bond mix of endowment pools as the size of the endowment increased, which was also noted in Section I.

Table 43

Endowment Size, Wealth, and Average Yield Percentage*

	6/30/82 Total Market Value (in billions)	6/30/82 Mean Endowment (in millions)	6/30/82 Median Endowment (in millions)	1982 Median Increase (in wealth)	Median Average Yield Percent
Over \$50 Million	\$14.890	\$236.403	\$119.788	-3.1%	8.0%
\$10-\$50 Million	2.425	25.530	21.592	-0.6	8.1
Under \$10 Million	.187	5.194	5.444	2.7	9.2
Independent	14.450	97.661	35.457	-1.5	8.1
Public	3.052	66.344	17.957	0.1	8.5
All Institutions	\$17.502	\$90.236	\$29.043	-1.4%	8.2%

*Endowment market value and wealth figures include life income funds. Yield percentages exclude life income funds.

Gifts to Endowment

Because each college or university and its alumni are unique, it is often difficult to draw analogies relating to gift giving among institutions. It is hoped that from data gathered over longer periods of time many useful trends will appear. Table 44 shows that, in 1982 and prior years, the smaller the institution the greater endowment gifts are as a percentage of market value. In each year, gifts to public institutions have represented a larger percentage of average market value than have those to independent institutions.

Gifts to all institutions as a percentage of market value for the eight years 1975 through 1982 continue to be in a rather tight range of about 2%, from 2.6% in 1974-75 to 4.4% in 1981-82, but trending upward. Gifts in 1982, 4.4% of average market value, were at their highest level since NACUBO began gathering these data.

Table 44

Gifts to Endowment as a Percentage of Average Market Value 1974-75 to 1981-82

	Median Endowment							
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82
Over \$50 million	2.0%	3.1%	2.3%	2.4%	2.7%	3.5%	2.9%	3.5%
\$10 to \$50 million	2.3	2.2	3.1	3.4	2.9	3.8	3.4	4.8
Under \$10 million	3.1	5.1	6.7	4.5	6.3	6.1	5.9	7.7
Independent	2.3	2.4	3.0	2.7	2.7	3.6	3.3	4.1
Public	3.6	4.7	3.7	4.1	4.6	5.4	5.7	5.6
All Institutions	2.6%	2.7%	3.1%	3.4%	3.3%	3.7%	3.4%	4.4%

Quasi-Endowment

Table 45 shows 1981-82 quasi-endowment gifts as a percentage of total endowment gifts. Quasi-endowment gifts are deemed more valuable than restricted gifts as these are gifts over which the institution has the greater discretion. The table shows that independent institutions have slightly less quasi-endowment as a percentage of total endowment than public institutions, and that the largest institutions have about the same percentage of quasi-endowment as the smallest, followed by the \$10-\$50 million group. In 1982 the median institution received 14.0% of its total gifts in quasi-endowment.

Table 45

Quasi-Endowment

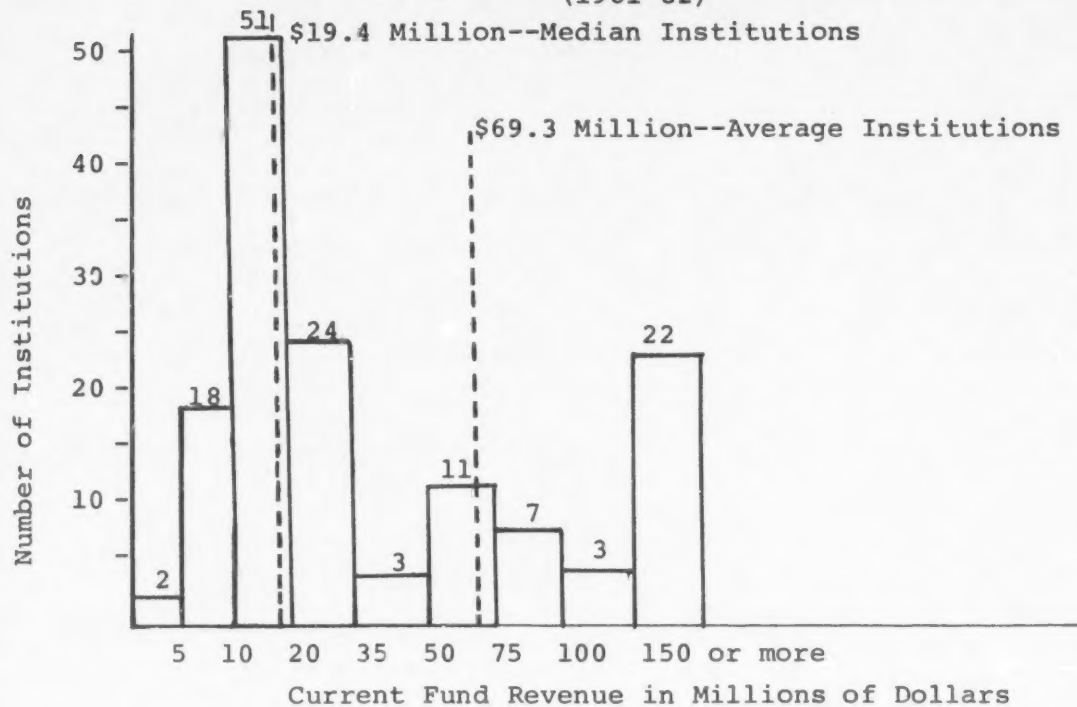
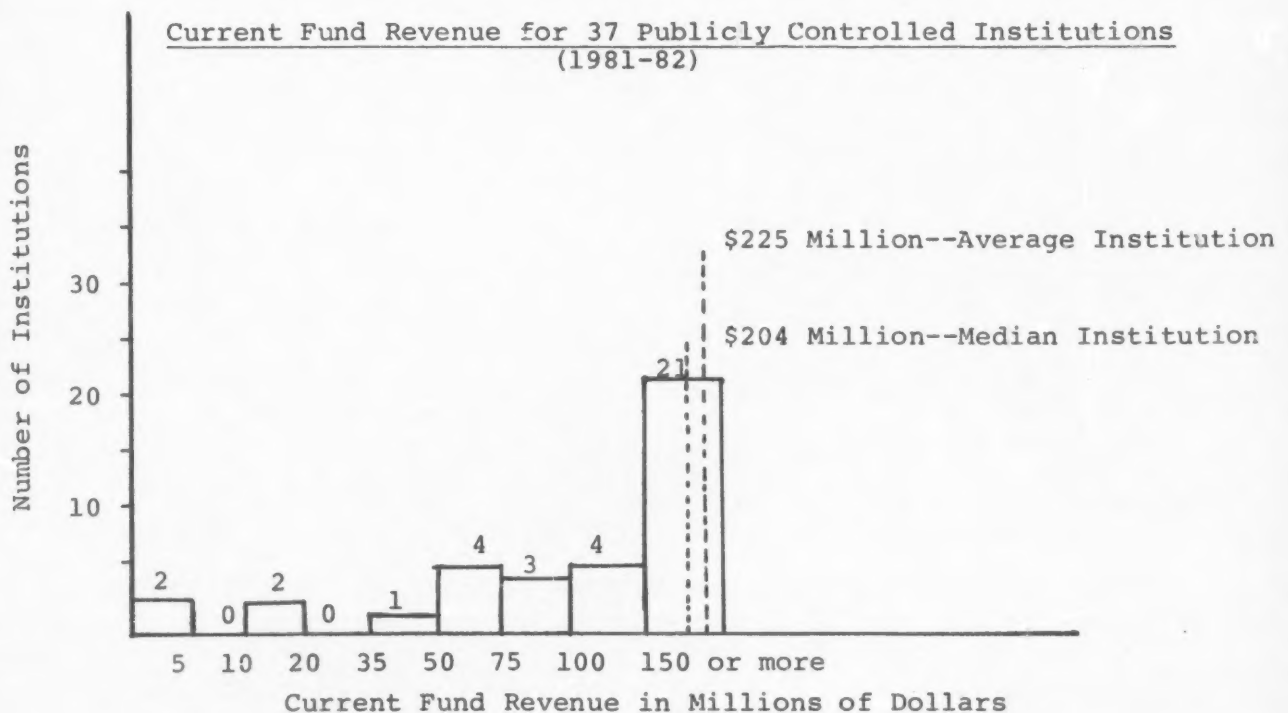
	<u>Total Quasi-Endowment As a Percentage of Total Endowment At June 30, 1982</u>		<u>1981-82 Quasi-Endowment Gifts as a Percentage of Total 1981-82 Gifts</u>	
	<u>Mean Endowment</u>	<u>Median Endowment</u>	<u>Mean Endowment</u>	<u>Median Endowment</u>
Over \$50 million	35.4%	32.7%	17.6%	9.0%
\$10 to \$50 million	30.6	27.9	25.9	19.8
Under \$10 million	30.5	32.0	28.1	13.7
Independent	31.5	28.8	23.1	13.9
Public	33.9	33.7	26.2	17.5
All Institutions	32.0%	29.9%	23.9%	14.0%

ENDOWMENT SPENDING AND SUPPORTCurrent Fund Revenue and Endowment Income

Current fund revenue and endowment income for both independent and public institutions are portrayed in Graphs III and IV. It can be seen from Graph III that two independent and two public institutions had current fund revenue of less than \$5 million. Eighteen independent institutions and no public institutions had current fund revenue of \$5 to \$10 million, etc. Graph IV shows, for example, that 6 independent institutions, or 4% (6/141), and 21 public institutions, or 62% (21/34) received income from endowment constituting less than 1% of current fund revenue, etc. The average amount of current fund revenue for independent and public institutions is \$69.3 million and \$225 million, respectively. The median figures are \$19.4 million and \$204 million. The average percentage of endowment income to current fund revenue for independent and public institutions is 11.8% and 1.4%, respectively. The median figures are 8.1% and 0.7%. This graph depicts the greater importance placed on the endowment of independent institutions relative to that of public institutions.

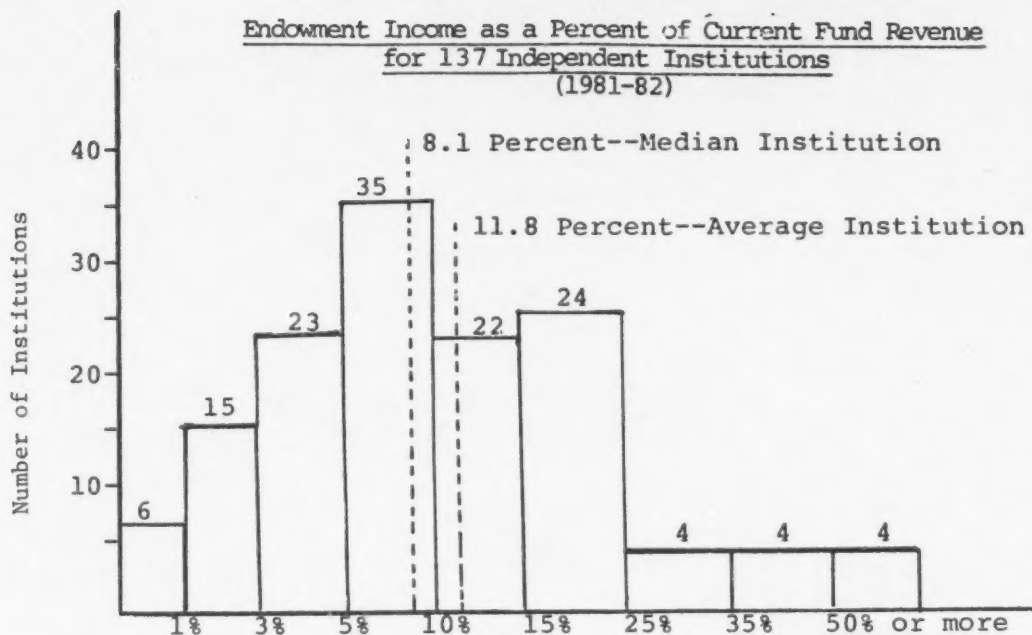
Endowment Coverage

Graph V shows the distribution of 140 independent institutions in terms of their average endowment as of June 30, 1981, and June 30, 1982, divided by fiscal 1982 current fund expenditures. For example, for two institutions the average market value of the endowment was greater than 7.5 times current fund expenditures. On the other hand, 27 institutions could not cover 50% of their current fund expenditures with their entire endowment. The endowment of the average institution is 1.89 times greater than current fund expenditures. The endowment of the median institution is 1.17 times greater.

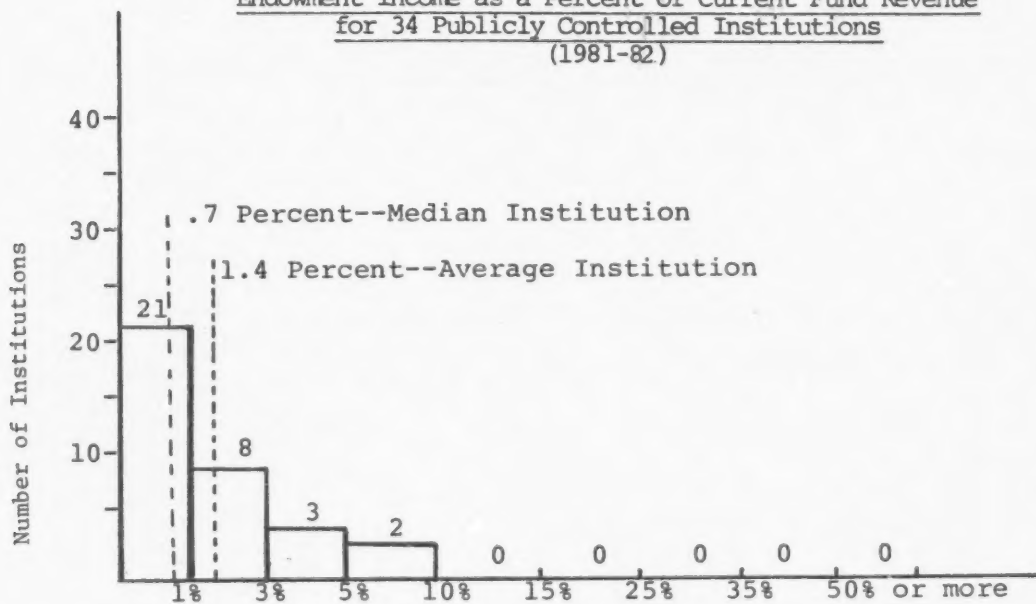
GRAPH IIICurrent Fund Revenue for 141 Independent Institutions
(1981-82)Current Fund Revenue for 37 Publicly Controlled Institutions
(1981-82)

GRAPH IV

Endowment Income as a Percent of Current Fund Revenue
for 137 Independent Institutions
 (1981-82)

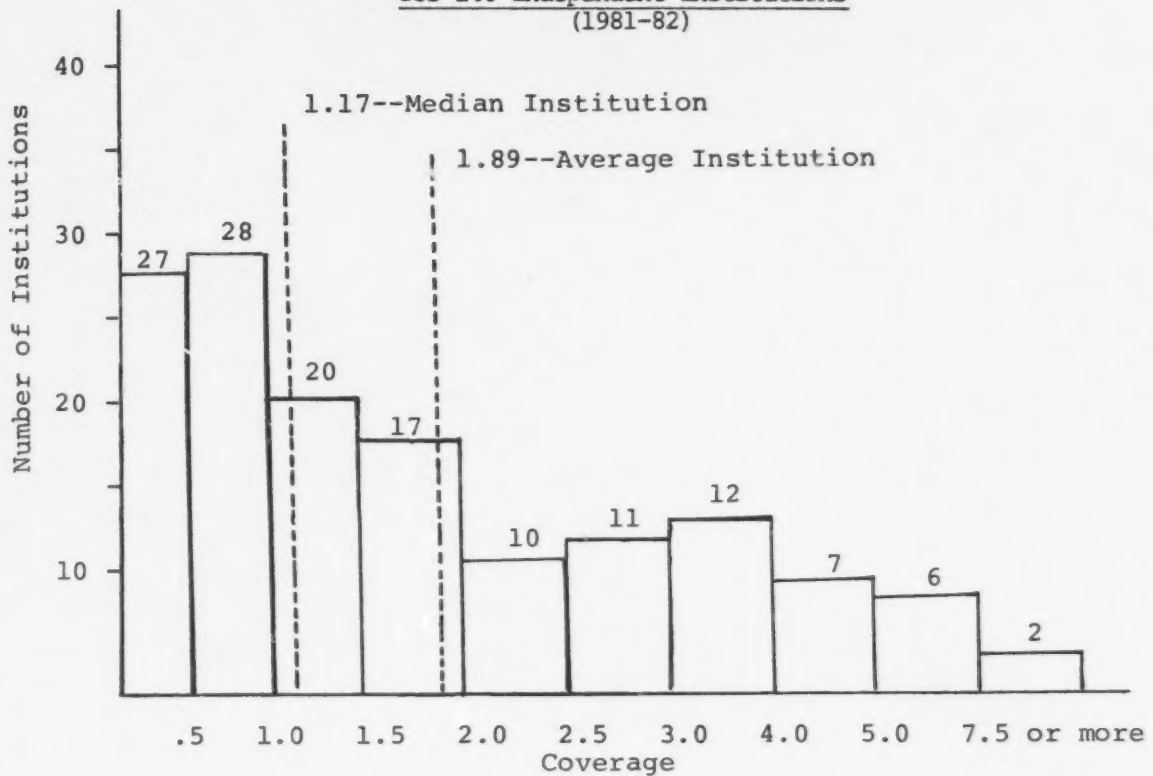


Endowment Income as a Percent of Current Fund Revenue
for 34 Publicly Controlled Institutions
 (1981-82)



GRAPH V

Endowment* Coverage of Current Fund Expenditures
for 140 Independent Institutions
(1981-82)

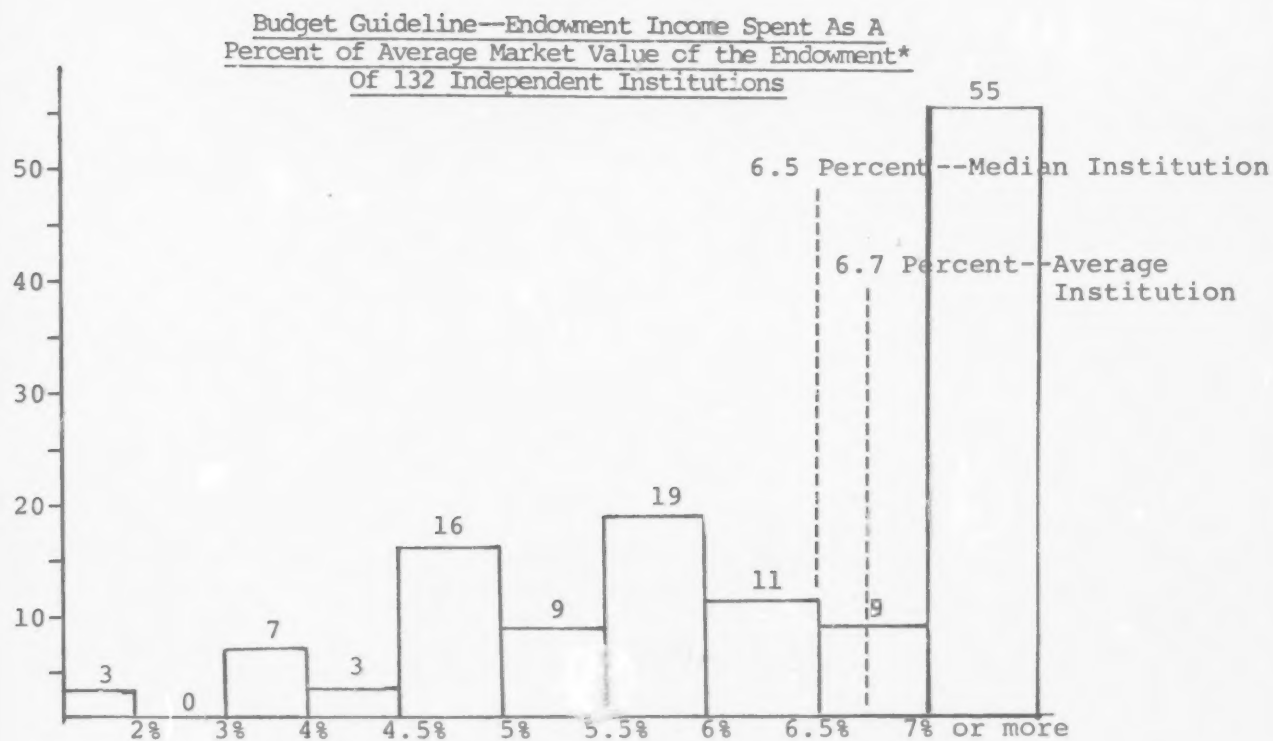


*Excluding life income funds.

Budget Guideline

Graph VI illustrates for independent institutions the amount of endowment spent for fiscal 1982 current operations as a percentage of the average market value. This percentage is the amount utilized from the endowment after any income is added back to principal and includes any appropriation of endowment principal during the fiscal year to help meet the current budget. In a sense it is a budget "guideline" showing what institutions during fiscal 1981-82 contributed from their total endowment to support their immediate needs. The budget guideline for the average and median institution is 6.7% and 6.5%, respectively.

GRAPH VI



*Excluding life income funds.

The 1982 median budget guideline increased 0.2% from the prior year. Part or most of this increase might be the result of lower stock and bond prices, rather than higher spending; this is difficult to determine. However, as shown in Table 46, spending as a percentage of endowment has increased almost 2 percentage points since NACUBO began gathering these data in 1974. After adjusting for restricted income that must be added to principal (about 3% of gross yield for the median institution), it seems that institutions are, in fact, spending less from endowment to meet expenses in these inflationary times than traditionally could be spent (all yield earned by endowment). The 6.5% median budget guideline is well over a full percentage point below the 8.1% average yield for independent institutions. One explanation for this may be that a number of institutions are adding income to principal to compensate for the loss of real endowment as a result of inflation and security market performance as evidenced in Table 41. Budget guideline figures are net of life income funds.

Table 46

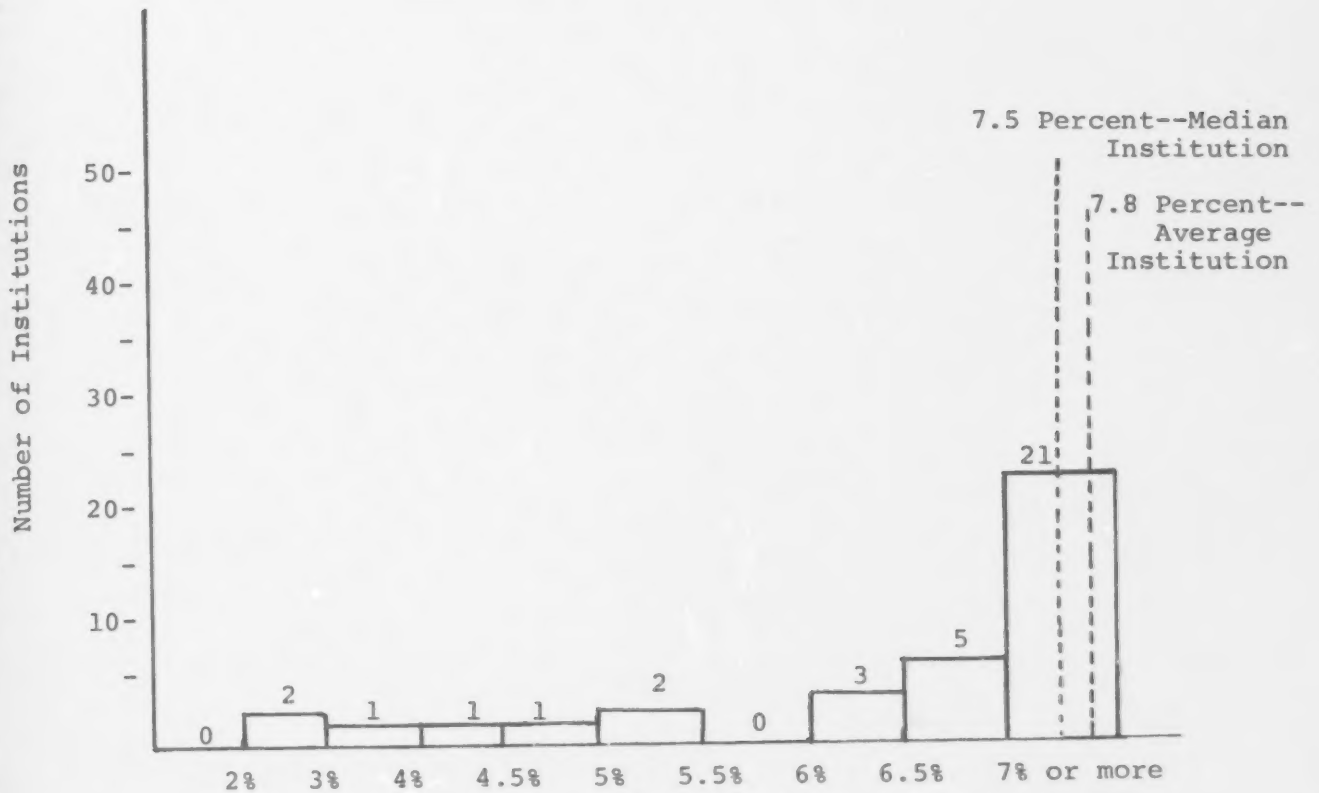
1974 to 1982 Budget Guideline--Endowment Income
Spent as a Percentage of Average Market Value of the
Endowment for Independent Institutions

	<u>Average</u> <u>Institution</u>	<u>Median</u> <u>Institution</u>
1982	6.7%	6.5%
1981	6.4	6.3
1980	6.8	6.4
1979	6.0	6.0
1978	5.8	5.6
1977	5.3	5.3
1976	5.0	5.0
1975	5.3	5.2
1974	4.8	4.8

Graph VII illustrates budget guideline figures for public institutions. The average guideline figure is 7.8% and the median figure is 7.5%. The latter figure is a full percentage point below the 8.5% average yield for public institutions. Similar results were found the prior year. Hence, both public and independent institutions appear to be adding income to principal.

GRAPH VII

Budget Guideline--Endowment Income Spent As A
Percent of Average Market Value of the Endowment*
Of 36 Public Institutions



Spending Practices of Institutions

In 1982, seventy-four institutions (40% of the 186 responding) indicated that they use a formula to determine spending from endowment. Of the 74 institutions, only eight reported spending a portion of appreciation (under the total return concept) as well as yield (interest, dividends, rent, etc.) to meet current expenditures. This would seem to indicate that the formulas being utilized "cap" the spending of yield and dictate adding income back to principal for reasons exclusive of donor and other similar restrictions. In fact, of the 167 institutions reporting their total fiscal 1981-82 distribution, 81 (49%) reported adding a portion of their gross yield to a reserve as a hedge against inflation or as part of their spending formula.

Restricted Yield

This is the second year NACUBO is reporting on restricted yield. Sixty-two percent (104 of 167) of institutions add income to principal due to donor or other restrictions. Table 47 shows the range of responses, based on restricted yield as a percentage of gross yield, categorized by size and by independent and public institutions.

Table 47

1981-82 Range of Institutional Responses of Restricted Yield as a Percentage of Gross Yield

<u>Percent of Gross Yield</u>	<u>Over \$50 Million</u>	<u>\$10-\$50 Million</u>	<u>Under \$10 Million</u>	<u>Independent Institutions</u>	<u>Public Institutions</u>	<u>All Institutions</u>
Under 2%	18	22	5	38	7	45
2 - 4%	5	6	2	11	2	13
4 - 6%	5	5	1	8	3	11
6 - 8%	2	3	1	3	3	6
8 - 10%	1	2	0	3	0	3
10 - 12.5%	1	3	0	1	3	4
12.5 - 15%	1	0	2	1	2	3
15 - 17.5%	2	1	0	3	0	3
17.5 - 20%	1	1	1	2	1	3
Over 20%	<u>2</u>	<u>6</u>	<u>5</u>	<u>9</u>	<u>4</u>	<u>13</u>
TOTAL	<u>38</u>	<u>49</u>	<u>17</u>	<u>79</u>	<u>25</u>	<u>104</u>

Utilization of Quasi-Endowment

This also is the second year NACUBO is reporting information regarding institutions which utilized quasi-endowment principal to help meet the budget. Table 48 shows the range of responses, based on quasi-endowment used for current operations as a percentage of distributed income, for the 18 institutions which reported utilizing quasi-endowment to meet expenditures in 1982.

Table 48

1981-82 Range of Responses of Institutions Reporting
Utilization of Quasi-Endowment to Meet the Budget
Percentage of Distributed Income

<u>Percent of</u> <u>Gross Yield</u>	<u>Over \$50</u> <u>Million</u>	<u>\$10-\$50</u> <u>Million</u>	<u>Under \$10</u> <u>Million</u>	<u>Independent</u> <u>Institutions</u>	<u>Public</u> <u>Institutions</u>	<u>All</u> <u>Institutions</u>
Under 2%	2	2	0	2	2	4
2 - 4%	1	1	0	1	1	2
4 - 6%	1	1	2	3	1	4
6 - 8%	2	1	0	3	0	3
8 - 10%	1	0	1	1	1	2
10 - 12.5%	0	0	0	0	0	0
12.5 - 15%	0	0	0	0	0	0
15 - 17.5%	0	0	0	0	0	0
17.5 - 20%	0	0	0	0	0	0
Over 20%	2	1	0	2	1	3
TOTAL	<u>9</u>	<u>6</u>	<u>3</u>	<u>12</u>	<u>6</u>	<u>18</u>

Profile of Distributable Endowment Income

Distributable endowment income is the distribution from endowment used to meet current expenditures. It is the gross yield from endowment, plus any total return appreciation utilized or quasi-endowment expended to meet the budget, less any yield added to principal for reserve purposes or as part of a spending formula, or due to donor restrictions. Thus, even institutions with a "yield only" spending policy might not be able to spend all gross yield because of donor restrictions or to establish a spending formula reserve. On the other hand, distributable income can exceed gross yield if an institution applies the total return concept or has current expenses greater than current revenue and needs to utilize endowment to meet current budget needs.

Distributable income in 1982 was 86.7% of gross yield, that is, the average institution added back to principal 13.3% of interest, dividends, rent, and other similar yield. The range of results is shown in Table 49. This table shows that 10 institutions distributed less than 50% of their gross yield and 13 institutions spent more income in 1982 than yield actually received. Of the 13, 6 of these institutions applied the total return concept and 7 were spending quasi-endowment to meet their budget expenditures.

Table 49

1981-82 Range of Institutional Responses of
Distributable Endowment Income as a Percentage
of Gross Yield from Endowment

<u>Percent of</u> <u>Gross Yield</u>	<u>Over \$50</u> <u>Million</u>	<u>\$10-\$50</u> <u>Million</u>	<u>Under \$10</u> <u>Million</u>	<u>Independent</u> <u>Institutions</u>	<u>Public</u> <u>Institutions</u>	<u>All</u> <u>Institutions</u>
Under 50%	1	5	4	7	3	10
50 - 60%	5	5	3	12	1	13
60 - 70%	9	9	4	20	2	22
70 - 75%	6	3	3	7	5	12
75 - 80%	5	5	1	11	0	11
80 - 85%	5	3	0	7	1	8
85 - 90%	6	7	2	11	4	15
90 - 95%	5	7	2	10	4	14
95 - 100%	6	32	11	35	14	49
Over 100%	<u>5</u>	<u>7</u>	<u>1</u>	<u>11</u>	<u>2</u>	<u>13</u>
TOTAL	<u>53</u>	<u>83</u>	<u>31</u>	<u>131</u>	<u>36</u>	<u>167</u>

Application of Endowment Spending Formulas

Exhibit IV describes the approach used by each of the seventy-four institutions indicating that they used a formula to determine 1982 spending from endowment. Of the 74 institutions, 5 (7%) adopted their formula in 1982, switching from a policy of spending yield in 1981. Seventeen institutions are considering a formula, while 37 considered and rejected adopting a formula. Sixty-one have yet to address this matter. Table 50 shows a distribution of those applying a formula, based on size and type of control.

Table 50

Institutions in Fiscal 1981-82 Which Applied
an Endowment Spending Formula

	<u>Independent</u>	<u>Public</u>	<u>Total</u>	<u>Percentage</u> <u>of Total</u>
Over \$100 Million	17	1	18	24%
\$50 - \$100 Million	11	1	12	16
\$25 - \$50 Million	14	2	16	22
\$10 - \$25 Million	15	4	19	26
\$5 - \$10 Million	5	1	6	8
Under \$5 Million	<u>2</u>	<u>1</u>	<u>3</u>	<u>4</u>
TOTAL	<u>64</u>	<u>10</u>	<u>74</u>	<u>100%</u>

Generally, most of the 74 institutions applied one of two different types of formulas: a formula which increased spending by a designated percentage over the prior year, or a formula based on a percentage of endowment market value. Of the 74 reporting their formula, 13 (18%) increased spending a designated percentage, 50 (67%) spent a percentage of endowment, and 11 (15%) used various other approaches.

Most of the market formulas apply a percentage to an endowment base averaged over a period of years. The most frequent period used was three years (about two-thirds of those responding), and the second most frequent, five years (about one-sixth). The remaining institutions generally used a market period closer to the subsequent budget year in question.

Endowment Support

Endowment principal and distributable endowment income per full-time equivalent (FTE) student and per faculty member for independent institutions are shown in Tables 51 through 55, respectively. No comparable tables have been produced for public institutions because of the general lack of significance placed on their endowments. Endowment support for approximately 60% of the public institutions responding was in the lowest category range for independent institutions, and over 85% of public institutions responding were in the lowest two categories.

However, a ranking based on endowment per full-time equivalent student for each independent institution and each public institution is shown in Tables 56 and 57, respectively. These tables also indicate endowment per FTE faculty member and the ratio of FTE students to FTE faculty members.

Table 51

Independent Institutions -- Endowment Principal
per FTE Student (1981-82)

<u>Amount</u>	<u>Number of Institutions</u>
Less than \$1,000	3
\$1,000 to \$5,000	29
\$5,000 to \$10,000	25
\$10,000 to \$15,000	18
\$15,000 to \$20,000	19
\$20,000 to \$25,000	9
\$25,000 to \$35,000	13
\$35,000 to \$50,000	14
\$50,000 to \$75,000	10
Greater than \$75,000	<u>5</u>
TOTAL	<u>145</u>
Average Institution*	\$21,460
Median Institution	\$13,900

Table 52

Independent Institutions -- Distributable Endowment Income
per FTE Student (1981-82)

<u>Amount</u>	<u>Number of Institutions</u>
Less than \$100	5
100 to \$200	14
200 to \$300	10
300 to \$500	16
500 to \$750	14
750 to \$1,000	17
1,000 to \$1,500	13
1,500 to \$2,000	13
2,000 to \$4,000	22
Greater than \$4,000	<u>7</u>
TOTAL	<u>131</u>
Average Institution*	\$1,300
Median Institution	\$850

*NOTE: Average figures exclude results for The Rockefeller University; see Table 56.

Table 53

Independent Institutions -- Endowment Principal
per Faculty Member (1981-82)

<u>Amount</u>	<u>Number of Institutions</u>
Less than \$25,000	6
25,000 to \$50,000	14
50,000 to \$75,000	11
75,000 to \$100,000	11
100,000 to \$125,000	10
125,000 to \$150,000	8
150,000 to \$200,000	19
200,000 to \$300,000	23
300,000 to \$400,000	7
Greater than \$400,000	<u>28</u>
TOTAL	<u>137</u>
Average Institution	\$235,150
Median Institution	\$170,000

Table 54

Independent Institutions -- Distributable Endowment Income
per Faculty Member (1981-82)

<u>Amount</u>	<u>Number of Institutions</u>
Less than \$1,000	2
1,000 to \$2,000	7
2,000 to \$3,000	9
3,000 to \$4,000	6
4,000 to \$5,000	7
5,000 to \$7,500	20
7,500 to \$10,000	12
10,000 to \$15,000	16
15,000 to \$20,000	14
Greater than \$20,000	<u>32</u>
TOTAL	<u>125</u>
Average Institution	\$14,825
Median Institution	\$9,750

Table 55

Eight-Year Endowment Record -- Principal and Income
per FTE Student and Faculty Member

	<u>Principal per FTE Student</u>		<u>Distributable Endowment Income per FTE Student</u>	
	<u>Average Response</u>	<u>Median Response</u>	<u>Average Response</u>	<u>Median Response</u>
1982	\$21,460	\$13,900	\$1,300	\$850
1981	23,550	14,600	1,200	775
1980	21,525	13,450	1,175	795
1979	20,250	11,700	1,125	680
1978	18,250	11,600	1,250	665
1977	17,725	10,000	950	585
1976	18,650	11,750	915	540
1975	15,550	9,400	800	510
1974	14,800	8,200	800	430

	<u>Principal per Faculty Member</u>		<u>Distributable Endowment Income per Faculty Member</u>	
1982	\$235,150	\$170,000	\$14,825	\$ 9,750
1981	251,650	169,000	13,625	8,775
1980	232,475	165,300	13,075	10,100
1979	224,350	156,800	12,825	9,050
1978	200,100	136,500	11,575	7,750
1977	189,000	135,000	10,200	6,800
1976	192,000	138,000	11,000	7,050
1975	162,000	118,000	8,700	6,250
1974	148,000	100,000	8,100	5,100

Table 56

1982 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

Institution	1982 Endowment in \$1,000's	# Of FTE Students	# Of FTE Faculty	Ratio Of Students To Faculty	Endowment Per Faculty In \$1,000's	Endowment Per Student In \$1,000's
1 ROCKEFELLER UNIV	240563	95	449	0.2	536	2532.2
2 PRINCETON UNIV	885772	5783	672	8.6	1318	153.2
3 ACADEMY OF THE NEW CHURCH	44186	408	54	7.6	818	108.3
4 CAL INST OF TECH	192426	1810	274	6.6	702	106.3
5 RICE UNIV	333487	3499	345	10.1	967	95.3
6 YALE UNIV	740600	9986	1365	7.3	543	74.2
7 GRINNELL COLLEGE	83220	1204	105	11.5	793	69.1
8 AGNES SCOTT COLLEGE	34627	539	67	8.0	517	64.2
9 AMHERST COLLEGE	94412	1530	150	10.2	629	61.7
10 BEREA COLLEGE	91161	1534	177	8.7	515	59.4
11 WELLESLEY COLLEGE	126224	2152	213	10.1	593	58.7
12 STANFORD UNIV	680621	12116	1269	9.5	536	56.2
13 DARTMOUTH COLLEGE	230071	4259	400	10.6	575	54.0
14 POMONA COLLEGE	72765	1357	136	10.0	535	53.6
15 COOPER UNION FOR THE ADV OF SCI&ART	43890	883	81	10.9	542	49.7
16 BAYLOR COLLEGE OF MEDICINE	44491	902	913	1.0	49	49.3
17 MASSACHUSETTS INST OF TECH	466977	9510	1221	7.8	382	49.1
18 WESLEYAN UNIV	121964	2581	234	11.0	521	47.3
19 SMITH COLLEGE	125150	2678	263	10.2	476	46.7
20 EARLHAM COLLEGE	46299	993	77	12.9	601	46.6
21 UNIV OF CHICAGO	394200	8649	732	11.8	539	45.6
22 VASSAR COLLEGE	98370	2227	229	9.7	430	44.2
23 THOMAS JEFFERSON UNIV	60149	1450	353	4.1	170	41.5
24 SOUTHWESTERN UNIV	37853	939	67	14.0	565	40.3
25 WASHINGTON UNIV	302200	8328	1685	4.9	179	36.3
26 CARLETON COLLEGE	60035	1710	138	12.4	435	35.1
27 SOUTHWESTERN AT MEMPHIS	37409	1066	115	9.3	325	35.1
28 MIDDLEBURY COLLEGE	66383	1906	130	14.7	511	34.8
29 OBERLIN COLLEGE	95924	2763	237	11.7	405	34.7
30 HAVERFORD COLLEGE	35773	1048	84	12.5	426	34.1
31 JOHNS HOPKINS UNIV	223994	6679	1633	4.1	137	33.5
32 LAFAYETTE COLLEGE	65142	2016	160	12.6	407	32.3
33 SWEET BRIAR COLLEGE	19932	629	78	8.1	256	31.7

1982 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

Institution	1982 Endowment In \$1,000's	# Of FTE Students	# Of FTE Faculty	Ratio Of Students To Faculty	Endowment Per Faculty In \$1,000's	Endowment Per Student In \$1,000's
34 OCCIDENTAL COLLEGE	49226	1554	118	13.2	417	31.7
35 PHIL C OF PHARM & SC	30826	1019	120	8.5	257	30.3
36 BRYN MAWR COLLEGE	48977	1626	143	11.4	342	30.1
37 MOUNT HOLYOKE COLLEGE	58382	1951	206	9.5	283	29.9
38 WHITMAN COLLEGE	31598	1169	92	12.7	343	27.0
39 TRINITY COLLEGE CONN	44373	1679	57	29.5	778	26.4
40 UNIV OF RICHMOND	86768	3312	295	11.2	294	26.2
41 HAMILTON COLLEGE	39544	1630	138	11.8	287	24.3
42 NORTHWESTERN UNIV	322286	13314	1508	8.8	214	24.2
43 LAWRENCE UNIV	26150	1085	105	10.3	249	24.1
44 UNIV OF NOTRE DAME	203767	8866	851	10.4	239	23.0
45 CARNEGIE MELLON UNIV	124176	5408	413	13.1	301	23.0
46 VANDERBILT UNIV	183889	8068	1279	6.3	144	22.8
47 BRANDEIS UNIV	71931	3400	355	9.6	203	21.2
48 DAVIDSON COLLEGE	28906	1393	105	13.3	275	20.8
49 CORNELL COLLEGE	18665	907	71	12.8	263	20.6
50 CASE WESTERN RESERVE UNIV	141222	7228	1354	5.3	104	19.5
51 WAKE FOREST UNIV	89151	4676	645	7.2	138	19.1
52 WILLAMETTE UNIV	34118	1833	123	14.9	277	18.6
53 CORNELL UNIV	317592	17158	1539	11.1	206	18.5
54 HENDRIX COLLEGE	17879	966	59	16.4	303	18.5
55 KNOX COLLEGE	17573	956	79	12.1	222	18.4
56 COLORADO COLLEGE	34720	1900	150	12.7	231	18.3
57 DREW UNIV	33860	1939	110	17.6	308	17.5
58 COLBY COLLEGE	29104	1673	126	13.3	231	17.4
59 WELLS COLLEGE	8943	515	58	8.9	154	17.4
60 BERRY COLLEGE	24012	1435	134	10.7	179	16.7
61 DUKE UNIV	151381	9073	1375	6.6	110	16.7
62 WORCESTER POLYTECHNIC INST	42694	2580	192	13.4	222	16.5
63 COLGATE UNIV	41415	2600	222	11.7	187	15.9
64 RENSSELAER POLYTECH INST	94191	5915	395	15.0	238	15.9
65 SPELMAN COLLEGE	22721	1447	105	13.8	216	15.7
66 BATES COLLEGE	22200	1445	102	14.2	218	15.4
67 ALMA COLLEGE	15771	1079	73	14.8	216	14.6
68 REED INSTITUTE	15220	1068	90	11.9	169	14.3
69 COLLEGE OF WOOSTER	23912	1720	125	13.8	191	13.9
70 BUCKNELL UNIV	42994	3100	215	14.4	200	13.9

1982 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

Institution	1982 Endowment In \$1,000's	# Of FTE Students	# Of FTE Faculty	Ratio Of Students To Faculty	Endowment Per Faculty In \$1,000's	Endowment Per Student In \$1,000's
71 SOUTHERN METHODIST UNIV	110368	8029	603	13.3	183	13.7
72 LEHIGH UNIV	70905	5358	342	15.7	207	13.2
73 WHEATON COLLEGE	16381	1246	101	12.3	162	13.1
74 DOANE COLLEGE	7820	596	46	13.0	170	13.1
75 RHODE ISLAND SCHOOL OF DESIGN	20670	1648	115	14.3	180	12.5
76 DENISON UNIV	25567	2085	159	13.1	161	12.3
77 BIRMINGHAM SOUTHERN COLLEGE	17615	1467	95	15.4	185	12.0
78 UNIV OF PENN	218250	18278	1585	11.5	138	11.9
79 HAMPTON INSTITUTE	36031	3114	230	13.5	157	11.6
80 KALAMAZOO COLLEGE	14579	1367	87	15.7	168	10.7
81 OHIO WESLEYAN UNIV	20363	1963	156	12.6	131	10.4
82 SAINT MARYS COLLEGE	18357	1799	144	12.5	127	10.2
83 COLUMBIA UNIV TEACHERS COLLEGE	26309	2600	150	17.3	175	10.1
84 BAYLOR UNIVERSITY	101639	10108	491	20.6	207	10.1
85 SIMMONS COLLEGE	24448	2763	183	15.1	134	8.8
86 LOYOLA UNIV OF CHICAGO	95059	10982	660	16.6	144	8.7
87 FRANKLIN AND MARSHALL COLLEGE	16825	1993	136	14.7	124	8.4
88 CLARK UNIV	15128	1950	143	13.6	106	7.8
89 FURMAN UNIV	17711	2328	152	15.3	117	7.6
90 MCGILL UNIV	147700	19452	964	20.2	153	7.6
91 CONNECTICUT COLLEGE	13130	1749	138	12.7	95	7.5
92 TULANE UNIV	67679	9206	812	11.3	83	7.4
93 GEORGETOWN UNIV	76479	10500	1015	10.3	75	7.3
94 UNIV OF SOUTHERN CALIF	182925	26262	1119	23.5	163	7.0
95 WITTENBERG UNIV	15199	2259	151	15.0	101	6.7
96 SAINT LOUIS UNIV	55572	8298	820	10.1	68	6.7
97 ALLEGHENY COLLEGE	12495	1902	135	14.1	93	6.6
98 UNIV OF PUGET SOUND	17815	2728	159	17.2	112	6.5
99 DICKINSON COLLEGE	11254	1739	142	12.2	79	6.5
100 MUHLENBERG COLLEGE	10199	1586	106	15.0	96	6.4
101 BABSON COLLEGE	8468	1351	95	14.2	89	6.3
102 BALDWIN WALLACE COLLEGE	14750	2443	133	18.4	111	6.0
103 ST NORBERT COLLEGE	9698	1664	84	19.8	115	5.8
104 ALFRED UNIVERSITY	7905	1358	113	12.0	70	5.8
105 UNIV OF SANTA CLARA	32168	5665	284	19.9	113	5.7
106 ROLLINS COLLEGE	7505	1371	104	13.2	72	5.5

1982 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR INDEPENDENT INSTITUTIONS ONLY

Institution	1982 Endowment In \$1,000's	# Of FTE Students	# Of FTE Faculty	Ratio Of Students To Faculty	Endowment Per Faculty In \$1,000's	Endowment Per Student In \$1,000's
107 ROCHESTER INST OF TECH	58622	10938	791	13.8	74	5.4
108 MORAVIAN COLLEGE	6869	1326	90	14.7	76	5.2
109 WENTWORTH INST OF TECH	13695	2898	167	17.4	82	4.7
110 NORWICH UNIV	10941	2370	140	16.9	78	4.6
111 TRINITY COLLEGE WASH	2635	572	100	5.7	26	4.6
112 PRATT INSTITUTE	16130	3583	265	13.5	61	4.5
113 MERCER UNIV	18208	4521	302	15.0	60	4.0
114 OTTERBEIN COLLEGE	5065	1331	104	12.8	49	3.8
115 SKIDMORE COLLEGE	8094	2220	177	12.5	46	3.6
116 AMERICAN UNIVERSITY OF BEIRUT	15183	4250	390	10.9	39	3.6
117 UNIV OF TULSA	17495	5055	289	17.5	61	3.5
118 UNIV OF DENVER	25351	7362	483	15.2	52	3.4
119 SYRACUSE UNIV	56012	17037	1019	16.7	55	3.3
120 HOPE COLLEGE	7460	2270	146	15.5	51	3.3
121 BRYANT COLLEGE OF BUS ADMIN	9280	2900	109	26.6	85	3.2
122 KENYON COLLEGE	4318	1434	105	13.7	41	3.0
123 OHIO NORTHERN UNIV	7646	2709	174	15.6	44	2.8
124 CLARKSON COLLEGE	10475	3869	202	19.2	52	2.7
125 BOSTON UNIVERSITY	55064	21298	1755	12.1	31	2.6
126 WASHBURN COLLEGE	10560	4159	241	17.3	44	2.5
127 DRAKE UNIV	11523	5351	308	17.4	37	2.2
128 MARQUETTE UNIV	21031	9859	667	14.8	32	2.1
129 GEORGE WASHINGTON UNIV	21187	11607	939	12.4	23	1.8
130 UNIV OF EVANSVILLE	5864	3339	252	13.3	23	1.8
131 UNIV OF SCRANTON	6411	3798	180	21.1	36	1.7
132 PHIL C OF TEXT & SC	3478	2361	161	14.7	22	1.5
133 UNIV OF TAMPA	2222	1672	89	18.8	25	1.3
134 RUSSELL SAGE COLLEGE	3840	3313	216	15.3	18	1.2
135 UNIV OF DAYTON	11132	9780	373	26.2	30	1.1
136 CANISUS COLLEGE	3482	3564	192	18.6	18	1.0
137 CHAPMAN COLLEGE	3554	4297	110	39.1	32	0.8

Table 57

1982 ENDOWMENT SUPPORT
RANKING BASED ON ENDOWMENT PER FULL-TIME EQUIVALENT STUDENT
FOR PUBLIC INSTITUTIONS ONLY

Institution	1982 Endowment In \$1,000's	# Of FTE Students	# Of FTE Faculty	Ratio Of Students To Faculty	Endowment Per Faculty In \$1,000's	Endowment Per Student In \$1,000's
1 UNIV OF VIRGINIA	154228	16247	932	17.4	165	9.5
2 UNIV OF DELAWARE	119168	15722	841	18.7	142	7.6
3 UNIV OF CINCINNATI	103421	27100	2016	13.4	51	3.8
4 UNIV OF PITTSBURGH	98262	26779	2360	11.3	42	3.7
5 UNIV OF VERMONT	27644	9269	773	12.0	36	3.0
6 UNIV OF NORTH CAROLINA	41377	19866	1880	10.6	22	2.1
7 UNIV OF TENNESSEE AT CHATTANOOGA	11279	5804	311	18.7	36	1.9
8 KANSAS UNIV END ASSOC	41873	22020	1323	16.6	32	1.9
9 OHIO STATE UNIV	94165	52710	3361	15.7	28	1.8
10 OHIO UNIV	25155	15005	710	21.1	35	1.7
11 UNIV OF NEVADA SYSTEM	13746	9242	330	28.0	42	1.5
12 RUTGERS THE STATE UNIV	49404	38146	2500	15.3	20	1.3
13 COLLEGE OF WILLIAM AND MARY	7608	6039	436	13.9	17	1.3
14 AUBURN UNIV	18511	17125	1027	16.7	18	1.1
15 NORTH CAROLINA STATE UNIV	17957	16868	1377	12.2	13	1.1
16 UNIV OF HOUSTON SYSTEM	31952	33297	1218	27.3	26	1.0
17 UNIV OF MISSOURI	42108	44437	2552	17.4	16	0.9
18 TEMPLE UNIV	12187	21956	1680	13.1	7	0.6
19 UNIV OF MAINE	11307	20657	1260	16.4	9	0.5
20 UNIV OF ARKANSAS AT FAYETTEVILLE	7938	15637	682	22.9	12	0.5
21 MICHIGAN STATE UNIV	16305	39343	2451	16.1	7	0.4
22 UNIV OF MARYLAND	19501	55995	2850	19.6	7	0.3
23 WASHINGTON STATE UNIV	5787	16827	1034	16.3	6	0.3
24 UNIV OF AKRON	5956	17927	719	24.9	8	0.3
25 PENN STATE UNIV	18848	63324	3140	20.2	6	0.3
26 OREGON STATE BD OF HIGHER ED	14901	53271	5110	10.4	3	0.3
27 INDIANA UNIV	14076	55540	3301	16.8	4	0.3
28 OCEAN COUNTY COLLEGE	738	3863	172	22.5	4	0.2
29 UNIV OF MISSISSIPPI	1713	9287	532	17.5	3	0.2
30 WESTERN MICH UNIV	2680	14794	841	17.6	3	0.2
31 EASTERN MICHIGAN UNIV	1881	14009	713	19.6	3	0.1
32 UNIV OF CONNECTICUT	1717	16658	1281	13.0	1	0.1
33 ARIZONA STATE UNIV	2352	30036	1416	21.2	2	0.1
34 UNIV OF MASSACHUSETTS	2238	29521	2387	12.4	1	0.1

INVESTMENT MANAGEMENT AND CUSTODY MATTERSInvestment Management

Twenty-seven of the institutions reporting indicated that they manage at least 80% of their endowments internally. Exhibit V lists these, along with the institutions which use outside management and their respective advisors. The exhibit indicates whether the outside manager is retained for stock (S) or bond (B) management or both (S,B). One hundred and six institutions indicated that they have more than one stock manager and 77 had more than one bond manager. The foregoing does not include the institutions which use The Common Fund for Non-Profit Organizations as an investment advisor for stocks, bonds, or cash. The 27 internally managed institutions are fairly well distributed among the various size investment pool categories shown in Table 58, with the greatest concentration among the largest pools.

Table 58

Internal Investment Management

<u>Investment Pool Size</u>	<u>Number in Each Group</u>	<u>Percentage of Total</u>
Over \$100 million	9	33%
\$50 to \$100 million	3	11
\$25 to \$50 million	4	15
\$10 to \$25 million	6	22
5 to \$10 million	1	4
Under \$5 million	<u>4</u>	<u>15</u>
TOTAL	<u>27</u>	<u>100%</u>

Custodial Arrangements

Only five institutions indicated that they serve as their own custodian for at least 80% of their assets. These institutions are shown in Exhibit IV as are the institutions which use outside custodians and the respective financial institution retained. Of the 185 indicating they use outside custodians, 75 use more than one custodian.

Custodial Fees

About two dozen institutions indicated that their custodian is also their investment advisor and that it was not possible to identify separately the cost for each service. Excluding these institutions and the five institutions which do not use outside custodians, 138 institutions provided information on custody fees. These fees excluded any custody costs relating to security lending, option writing, or investment management.

It is difficult to find an accurate measure to compare institutional custody fees. This is because many special arrangements have developed between institutions and their custodians. For example, from earlier surveys it is known that institutions with longer custodial relations tend

to pay less. Custodial fees will also vary because of the different number of security positions and shares, etc. The foregoing should be taken into consideration when reviewing custodial fees which are compared based on fees paid as a percentage of assets under custody.

Table 59 shows that the average institution pays 0.067% of the market value of assets under custody. Seven institutions pay less than 0.01%, 15 others pay 0.01 and 0.02%, etc. There appears to be a realization of economies of scale, as institutions over \$50 million pay 0.040%, institutions between \$10 and \$50 million pay 0.071%, and institutions under \$10 million pay 0.163%.

Table 59

Custodial Fees as a Percentage of Assets under Custody

	<u>Under \$10 Million</u>	<u>\$10 to \$50 Million</u>	<u>Over \$50 Million</u>	<u>All Institutions</u>
Under .01%	3	4	0	7
.01 to .02%	6	8	1	15
.02 to .03%	4	5	0	9
.03 to .04%	12	3	0	15
.04 to .05%	6	4	1	11
.05 to .06%	0	6	0	6
.06 to .07%	5	4	1	10
.07 to .08%	1	4	0	5
.08 to .09%	0	3	2	5
.09 to .10%	2	4	2	8
.10 to .125%	1	8	0	9
.125 to .15%	1	3	3	7
.15 to .175%	2	4	2	8
.175 to .20%	1	2	1	4
Over .20%	<u>2</u>	<u>7</u>	<u>10</u>	<u>19</u>
TOTAL	<u>46</u>	<u>69</u>	<u>23</u>	<u>138</u>
Median Responses	0.040%	0.071%	0.163%	0.067%

INVESTMENT POLICY AND PRACTICE

Investment Policy Statement

One hundred and forty-two institutions, 76% of the 188 reporting, indicated they have a written statement of investment objectives.

Option Writing

Twenty-nine institutions reported they participate in the call option market, two of which participate in the put option market as well. Twenty (three more than last year) reported they began writing call options and stopped, and about two dozen presently have this matter under consideration. Of the remaining institutions, about half considered writing options and rejected the idea and about half did not consider writing options. The market size distribution of those using options is shown in Table 60.

Some institutions use options in a very specific way, such as writing only on special holdings, or as part of a sale strategy. About half the remaining institutions have pilot option writing programs on a fully "covered" basis, and half write options on their mainstream endowment holdings. Certain programs are considered incremental, or "override," programs, forbidding stocks from being called away. These consequently are structured to have no effect on the underlying equity investment. The 29 institutions place various parameters on their approach to the options market, some which are as follows:

- . Write covered options on stocks already in their portfolio.
- . Write covered options on up to a specific percentage of their portfolio (e.g., 5%, 10%, or 20%).
- . Write covered options on up to a specific percentage of their total portfolio (e.g., 2.5%, 5%, 10%, or 20%).
- . Write covered options on up to a specific dollar amount (e.g., \$1.25, \$2.50, \$5, or \$10 million).
- . Write options only on securities they would consider selling anyway.
- . Write options on up to half of internally managed holdings, on a maximum of 20 different securities.
- . Write options on a percentage of an existing position (e.g., 10%, 25%, or 50%).
- . Segregate cash to buy stocks and write options on issues of manager's approved list.
- . Options must be repurchased; securities cannot be called.
- . Sell put options on up to a specific dollar amount of assets.

Over half the institutions participating in the option market have been doing so for at least three years, as shown in Table 60.

Table 60

Size of Institutions
Participating in Stock Option Writing at June 30, 1982

<u>Endowment Size</u>	<u>Number Participating</u>	<u>Percentage Participating</u>
Over \$100 Million	9	31%
\$50 to \$100 Million	8	28
\$25 to \$50 Million	2	7
\$10 to \$25 Million	5	17
\$5 to \$10 Million	4	14
Under \$5 Million	<u>1</u>	<u>3</u>
TOTAL	<u>29</u>	<u>100%</u>

Venture Capital

Of the 180 institutions responding to this question, 32, or 18%, have made investments in venture capital. All but one of these institutions are independent. Generally speaking, as shown in Table 61, the larger institutions have been more active in this area. Total venture capital investments represent less than 5% of total June 30, 1982 endowment assets.

Table 61

Range of Responses for All Institutions of
Venture Capital Investments
as a Percentage of June 30, 1982 Endowment Assets

<u>Percentage of</u> <u>Endowment</u>	<u>Over \$100</u> <u>Million</u>	<u>\$50-\$100</u> <u>Million</u>	<u>\$25-\$50</u> <u>Million</u>	<u>\$10-\$25</u> <u>Million</u>	<u>\$5-\$10</u> <u>Million</u>	<u>Under \$5</u> <u>Million</u>	<u>Total</u>
Under 1%	4	1	0	1	1	0	7
1 - 2.5%	9	1	0	1	0	0	11
2.5 - 5%	6	0	3	2	0	0	11
5 - 7.5%	1	0	1	0	0	0	2
7.5% - 10%	0	0	0	0	0	0	0
Over 10%	0	1	0	0	0	0	1
TOTAL	<u>20</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>1</u>	<u>0</u>	<u>32</u>

Institutions responding positively to investing in venture capital were also asked to indicate if assets were valued at book or market (estimated fair value), and whether venture capital assets were included in the institution's performance measurement pool reported in Section I. Thirteen of 31 responding (42%) carry their venture investments at market or estimated fair value. Twenty-two of 31 (71%) include these assets in their performance measurement pool. Half of those 22 carry venture capital assets at book and half at market.

Futures Market

Only four institutions indicated they use "financial futures" as a tool in managing the fixed-income portion of their portfolio. One institution invested in gold futures, and one invested in corn and hog commodity futures.

Investment in Gold

Only three institutions of the 181 responding to this question indicated they invest in gold stocks. Four others invest in companies with significant exposure to gold that might be considered a gold play. No institution invested in gold coins, although two stated they have chosen to retain, as an investment, gold and other coins received as part of a collection from donors. As noted above, one institution invests in gold futures.

Foreign Investments

Of the 185 institutions responding to this question, 91, or 49%, indicated they permit investment in foreign securities. Another 19, or 10%, allow such investments by exception. Seventy-one, or 38%, do not permit such investments and two others are considering foreign security investments.

Of the 91 institutions that indicated they permit endowment investment in foreign securities, forty-six (51%) have actually made such investments. A summary of responses is shown in Table 62.

Table 62

Assets Invested in Foreign Securities
as a Percentage of June 30, 1982 Endowment

	<u>Over \$50</u> <u>Million</u>	<u>\$10-\$50</u> <u>Million</u>	<u>Under \$10</u> <u>Million</u>	<u>Independent</u> <u>Institutions</u>	<u>Public</u> <u>Institutions</u>	<u>All</u> <u>Institutions</u>
Less than .5%	5	6	0	10	1	11
.5% to 1%	4	3	0	6	1	7
1% to 1.5%	7	2	1	9	1	10
1.5% to 2.0%	0	2	0	2	0	2
2.0% to 2.5%	2	1	0	3	0	3
2.5% to 3.0%	1	0	1	1	1	2
3.0% to 3.5%	2	2	0	3	1	4
3.5% to 4.0%	0	2	0	1	1	2
4.0% to 4.5%	1	1	0	2	0	2
4.5% to 5.0%	0	0	0	0	0	0
Over 5.0%	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>3</u>
TOTAL	24	20	2	40	6	46

South African Investments

One hundred twenty of the institutions responding to this question, or 63%, indicated they do not have a specific policy relating to U.S. companies that are doing business in the Republic of South Africa or a policy affecting the direct investment in South African companies. Seventy, or 37%, responded that they do have such a policy. Their statements are too lengthy to report in this survey.

EXHIBIT I1982 NACUBO COMPARATIVE PERFORMANCE STUDY194 PARTICIPATING INSTITUTIONS (REPRESENTING 218 POOLS)

Academy of the New Church	Franklin and Marshall College
Agnes Scott College	Furman University
Alfred University	George Washington University
Allegheny College	Georgetown University
Alma College	Grinnell College
American University of Beirut	Hamilton College
Amherst College	Hampton Institute
Arizona State University	Harvard University
Babson College	Haverford College
Baldwin-Wallace College	Hendrix College
Bates College	Hollins College
Baylor College of Medicine	Hope College
Berea College	Howard University
Berry College	Indiana University
Boston University	Johns Hopkins University
Brandeis University	Kalamazoo College
Brown University	Kansas Univ Endowment Association
Bryant College	Kenyon College
Bryn Mawr College	Knox College
Bucknell University	Lafayette College
California Institute of Technology	Lawrence University
Canisius College	Lehigh University
Carleton College	Loyola University of Chicago
Carnegie-Mellon University	McGill University
Case Western Reserve University	Marquette University
Claremont McKenna College	Massachusetts Institute of Tech.
Clark University	Medical College of Pennsylvania
Clarkson College of Technology	Mercer University
Colby College	Miami University
Colgate University	Michigan State University
College of William & Mary	Middlebury College
College of Wooster	Monmouth College
Colorado College	Moravian College
Columbia University	Mount Holyoke College
Columbia University, Teachers College	Muhlenberg College
Connecticut College	Newberry College
Cooper Union	New York University
Cornell College	North Carolina State University
Cornell University	Northwestern University
Dartmouth College	Norwich University
Davidson College	Oberlin College
Denison University	Occidental College
Dickinson College	Ocean County College
Doane College	Ohio Northern University
Drake University	Ohio State University
Drew University	Ohio University
Duke University	Ohio Wesleyan University
Earlham College	Oregon State Board of Higher Ed.
Eastern Michigan State University	Otterbein College
Emory University	Pennsylvania State University
Endowment Assoc. of William & Mary	Philadelphia College of Pharm & Sc.

Philadelphia College of Tex. & Sc.	University of Iowa
Pomona College	University of Maine
Pratt Institute	University of Maryland
Princeton University	University of Massachusetts
Radcliffe College	University of Miami
Reed College	University of Michigan
Rensselaer Polytechnic Institute	University of Mississippi
Rhode Island School of Design	University of Missouri
Rice University	University of Nebraska
Rochester Institute of Technology	University of North Carolina
Rockefeller University	University of Notre Dame
Rockhurst College	University of Pennsylvania
Rollins College	University of Pittsburgh
Russell Sage College	University of Puget Sound
Rutgers, The State University of N.J.	University of Richmond
St. Louis University	University of Santa Clara
St. Mary's College	University of Scranton
St. Norbert College	University of Southern California
Simmons College	University of Tampa
Skidmore College	University of Tennessee-Chattanooga
Smith College	University of Tennessee-Knoxville
Southern Methodist University	University of Texas
Southwestern University	University of Tulsa
Spelman College	University of Utah
Stanford University	University of Vermont
State University of New York	University of Virginia
Swarthmore College	University of Wisconsin Foundation
Sweet Briar College	University of Wisconsin System
Syracuse University	Vanderbilt University
Temple University	Vassar College
Thomas Jefferson University	Wake Forest University
Trinity College (Conn.)	Washburn College
Tulane University	Washington State University
University of Akron	Washington University
University of Alabama System	Wellesley College
University of Arizona	Wells College
University of Arkansas	Wentworth Institute of Technology
University of Chicago	Wesleyan University
University of Cincinnati	Western Michigan University Fdn.
University of Connecticut	Wheaton College
University of Dayton	Whitman College
University of Delaware	Willamette College
University of Denver	Williams College
University of Evansville	Wittenberg University
University of Houston System	Worcester Polytechnic Institute
University of Illinois	Yale University

EXHIBIT II

1982 COMPARATIVE PERFORMANCE STUDYCHARACTERISTICS OF PARTICIPATING INVESTMENT POOLSPool Characteristics:

- 1) This is a pooled fund consisting principally of endowment and similar funds.
- 2) This is a separately invested fund which was unitized to enable performance to be accurately measured.
- 3) This is a combination of more than one fund.
- 4) This is a pool consisting of only those assets over which management has discretion.
- 5) This is a pooled life income fund.

Pool Composition:

- 1) All invested funds, endowment, quasi-endowment, and funds invested for plant or other purposes but temporarily invested in the pool.
- 2) Endowment and quasi-endowment.
- 3) Endowment only.
- 4) Quasi-endowment only.

Investment Objectives:

- 1) Total Return - Investment returns are sought from both market appreciation and dividends and interest; current income requirements generally do not dictate the kind of securities that may be held, as primary emphasis is on long-term overall return.
- 2) Balanced - The pooled funds are invested in such a manner as to minimize investment risks without unduly sacrificing current income or the possibility for some long-term growth. This is usually done by investing a portion of the pool in fixed income securities.
- 3) Income Orientated - Investment policy is dictated by current income needs; market appreciation is never utilized for current operating purposes, and primary emphasis is on current income maximization.

Market Value:

- A. Over \$100 Million.
- B. \$50 to \$100 Million.
- C. \$25 to \$50 Million.
- D. \$10 to \$25 Million.
- E. \$5 to \$10 Million.
- F. Under \$5 Million.

1982 NACUBO COMPARATIVE PERFORMANCE STUDY
CHARACTERISTICS OF PARTICIPATING INVESTMENT POOLS

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscel- laneous Assets 1982	% Non- Control- lable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn-Over %	1982 Stock Turn-Over %
1	E1	1	2	1	A	15	22	59	2	2	2	45	110	N/A	N/A
2	E2	1	3	2	D	11	21	66	0	2	2	25	40	71.4	20.6
3	E3	1	2	1	D	27	16	57	0	0	0	22	48	13.6	5.2
4	E4	1	2	1	D	12	19	65	4	0	0	17	53	42	43
5	E5	1	2	1	B	0	29	71	0	0	1	N/A	N/A	N/A	N/A
6	E6	1	2	2	B	9	42	49	0	0	0	22	136	15.4	22.8
7	E7	1	2	1	F	28	34	39	0	0	1	N/A	N/A	N/A	N/A
8	E8	1	2	1	A	16	26	56	0	3	1	N/A	110	N/A	N/A
9	E9	1	3	2	E	25	43	32	0	0	1	9	14	141.3	16.5
10	E10	1	2	1	D	14	20	66	0	0	0	14	49	43	43
11	E11	3	1	1	A	1	10	20	0.9	68	1	N/A	N/A	N/A	N/A
12	E12	5	2	1	F	25	22	54	0	0	0	7	26	0	8.8
13	E13	1	2	3	D	18	52	28	0	2	1	44	51	39.9	38.3
14	E14	1	2	2	D	8	16	69	0	7	7	29	43	26	9
15	E15	1	2	2	C	8	27	45	12.8	7	19	24	73	5	53
16	E16	1	2	1	D	18	28	52	2	1	4	11	58	N/A	N/A
17	E17	1	2	2	B	4	34	56	0	6	5	42	36	91	37
18	E18	1	1	1	A	15	18	65	0	3	0	52	48	12	27
19	E19	1	1	1	B	21	13	62	0	3	6	18	145	N/A	N/A
20	E20	1	2	1	C	4	51	44	1	0	0	37	93	22	9
21	E21	1	2	2	A	0	45	55	0	0	2	55	65	N/A	1
22	E22	1	3	3	D	14	49	37	0	0	1	58	43	16.8	10.7
23	E23	1	2	2	F	52	13	26	0	9	1	N/A	N/A	N/A	N/A
24	E24	1	2	1	D	11	33	53	0	4	0	27	59	33	53
25	E25	1	2	1	D	5	22	72	0	2	1	20	102	N/A	N/A
26	E26	1	2	2	D	5	24	70	0	2	0	51	2	43.6	8.2
27	E27	1	2	2	B	5	40	53	0	2	1	53	149	71.8	89.9
28	E28	1	2	2	A	33	63	2	2	0	0	N/A	N/A	N/A	N/A
29	E29	1	2	1	A	3	30	65	0	2	0	27	76	27.5	33.5
30	E30	2	1	2	A	11	29	59	0.1	1	1	38	62	2.1	33.6
31	E31	1	2	2	A	9	37	36	1.2	18	4	89	174	92.7	39.4
32	E32	1	2	2	C	19	37	44	0	0	0	35	51	4	23
33	E33	4	2	1	A	10	19	71	0	0	0	26	142	177.8	41.9
34	E34	1	2	2	A	5	10	67	15.9	2	19	22	178	74	20.9
35	E35	1	2	3	C	15	27	57	0	1	0	30	105	2	24

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscellaneous Assets 1982	% Non-Control-able Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn-Over %	1982 Stock Turn-Over %
36	E36	4	1	1	A	22	17	58	3	0	0	6	104	64	41
37	E37	1	2	2	B	2	56	38	0	4	3	75	136	N/A	N/A
38	E38	1	2	1	A	8	28	58	0	6	1	46	73	180	33
39	E39	1	2	1	D	13	29	58	0	0	0	28	81	0.6	27
40	E40	1	2	1	A	7	15	65	10	3	8	N/A	N/A	N/A	N/A
41	E41	4	3	3	E	9	54	37	0	0	1	42	78	45	89
42	E42	1	2	2	E	15	38	47	0	0	0	47	64	5.4	7.3
43	E43	1	2	2	C	16	16	66	0	1	1	13	48	8.7	22.5
44	E44	1	3	2	F	27	30	43	0	0	0	9	31	26	0
45	E45	1	2	1	A	4	38	50	0	9	1	71	39	79.5	39
46	E46	1	2	2	A	9	14	77	0	0	1	46	120	18.2	15.1
47	E47	1	2	1	B	9	33	57	0.3	1	1	28	72	200	62.7
48	E48	1	2	1	E	22	0	46	0	32	37	N/A	35	N/A	12
49	E49	1	2	1	C	15	37	48	0	0	2	29	81	N/A	N/A
50	E50	1	2	1	C	70	10	20	0	0	1	7	7	30	53.3
51	E51	1	2	1	C	24	43	28	5.3	0	5	10	26	10.6	45.8
52	E52	1	2	1	D	9	15	71	1.2	4	11	13	83	1.6	55
53	E53	1	2	2	B	12	21	64	0	3	2	15	96	N/A	N/A
54	E54	1	2	1	C	10	16	68	0	6	0	18	130	153	45
55	E55	1	2	1	C	14	29	57	0	0	12	30	84	111	39
56	E56	1	2	1	B	29	19	51	0.9	0	0	41	88	94.6	44.3
57	E57	1	1	2	A	9	38	48	0.9	4	1	216	230	354	39
58	E58	1	2	2	D	26	23	35	0.4	15	12	39	53	56	1
59	E59	1	2	2	D	41	21	37	0	1	1	9	25	43	33
60	E60	1	2	2	D	9	37	37	2	15	19	35	28	20	35
61	E61	1	1	1	D	2	31	67	0	0	0	27	36	71	31
62	E62	1	2	2	E	7	24	69	0	0	0	21	34	16	39.2
63	E63	1	2	1	A	18	35	47	0	0	2	23	146	N/A	49
64	E64	1	2	1	E	17	30	53	0	0	1	11	49	38	68
65	E65	1	2	1	C	14	33	50	0	4	4	41	82	33.2	45.5
66	E66	1	1	1	C	8	44	48	0	0	6	33	60	39.4	118.6
67	E67	1	2	1	C	27	19	54	0	0	0	N/A	N/A	N/A	N/A
68	E68	3	1	1	C	6	31	63	0	0	2	38	94	53	44
69	E69	1	2	1	B	13	20	65	0	1	2	27	137	64.5	77.7
70	E70	1	1	2	D	5	31	62	0	2	0	N/A	73	0	71

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscellaneous Assets 1982	% Non-Control-lable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn-Over %	1982 Stock Turn-Over %
71	E71	3	2	1	C	10	38	52	0	0	0	0	0	N/A	N/A
72	E72	1	2	2	B	14	25	55	0.6	6	7	N/A	103	N/A	N/A
73	E73	1	2	2	A	13	42	42	0.5	3	1	28	161	123.8	16.1
74	E74	1	2	1	D	9	32	56	1	1	1	44	62	1	8
75	E75	1	1	1	C	3	26	71	0	0	0	63	63	0.1	9.2
76	E76	1	3	2	F	17	27	56	0	0	0	17	47	169	27.8
77	E77	5	2	2	F	4	42	54	0	0	0	17	50	170.2	16.3
78	E78	2	2	2	D	27	38	35	0	0	0	30	66	25.2	15.5
79	E79	2	2	2	D	27	33	40	0	0	0	28	25	0	0
80	E80	3	2	2	C	28	49	21	0.8	2	1	56	29	10	30
81	E81	1	2	1	D	19	17	41	11.6	11	3	39	N/A	N/A	87.3
82	E82	1	2	2	F	0	61	39	0	0	1	N/A	N/A	N/A	N/A
83	E83	1	2	2	F	0	41	59	0	0	1	N/A	N/A	N/A	N/A
84	E84	1	2	2	F	22	44	35	0	0	0	14	36	356	81.6
85	E85	1	2	2	C	8	41	40	9.8	1	10	47	57	52.9	51.4
86	E86	3	2	2	D	35	13	53	0	0	0	25	93	0	44
87	E87	5	2	3	F	63	37	0	0	0	0	N/A	N/A	N/A	N/A
88	E88	5	2	3	F	26	74	0	0	0	0	N/A	N/A	N/A	N/A
89	E89	1	1	2	B	5	11	36	17.1	31	1	38	134	24.3	28.5
90	E90	1	1	2	A	18	35	46	0	1	1	41	42	N/A	N/A
91	E91	2	3	2	F	17	35	48	0	0	1	28	28	16.8	11.7
92	E92	5	2	2	F	0	43	57	0	0	0	20	28	42	28
93	E93	1	4	2	B	21	13	42	9.5	14	1	17	47	68.8	10.9
94	E94	3	2	1	D	13	17	70	0	0	1	9	51	0	13.3
95	E95	2	2	2	C	6	17	46	3.2	28	1	26	46	N/A	N/A
96	E96	1	2	2	B	20	40	38	0	3	5	62	69	6.5	9.6
97	E97	3	3	3	F	3	36	61	0	0	0	51	70	18	31
98	E98	1	2	1	F	19	25	56	0	0	0	18	36	0	8.6
99	E99	1	2	1	D	16	36	46	0	2	2	35	56	48	74
100	F100	1	2	2	B	21	22	57	0	0	0	75	92	34.9	9.5
101	E101	1	2	2	D	5	23	72	0	0	0	56	64	18.9	7.6
102	E102	1	3	2	D	4	28	68	0	0	0	N/A	N/A	N/A	N/A
103	E103	1	2	2	E	12	33	56	0	0	0	28	61	13.7	22.2
104	E104	1	2	2	F	14	32	54	0	0	0	21	61	4.7	21.8
105	E105	2	2	1	F	18	21	61	0	0	0	N/A	N/A	N/A	N/A

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscel- laneous Assets 1982	% Non- Control- lable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn- Over %	1982 Stock Turn- Over %
106	E106	1	2	2	E	15	38	23	23.1	1	26	18	35	36	43.1
107	E107	1	2	2	F	0	38	62	0	0	0	25	37	0	12.5
108	E108	1	2	2	C	13	31	56	0	0	1	32	76	100	24
109	E109	1	2	1	F	28	47	24	0	0	0	18	29	17.1	58.3
110	E110	3	1	2	A	22	26	29	23	0	1	35	126	75	112
111	E111	3	2	2	E	15	36	25	21.6	2	25	22	61	36.2	52.7
112	E112	1	3	2	C	6	29	65	0	0	0	14	29	3.6	3.5
113	E113	1	2	2	F	0	35	65	0	0	22	6	21	1	20
114	E114	1	2	2	E	22	49	28	1	0	0	28	27	N/A	N/A
115	E115	1	2	2	E	10	37	53	0	0	0	15	15	N/A	N/A
116	C1	1	3	2	D	6	31	63	0	1	0	24	31	5.6	9
117	C2	1	1	1	B	15	37	47	0.9	0	33	38	61	2	92
118	C3	1	3	1	B	16	20	54	0	11	15	64	59	5.9	2.9
119	C4	1	2	2	C	1	26	74	0	0	0	66	71	0.2	4.4
120	C5	1	2	2	D	4	26	26	0	0	0	66	45	N/A	N/A
121	C6	1	2	2	D	12	75	1	43.7	11	8	45	19	132.6	206.1
122	C7	3	1	1	A	88	7	5	1.1	0	0	14	24	452	136
123	C8	1	2	1	B	3	32	54	8	3	13	44	163	N/A	N/A
124	C9	1	2	2	A	11	34	51	2.5	1	0	112	375	N/A	N/A
125	C10	1	1	1	F	12	34	55	0	0	0	11	42	0	18.2
126	C11	2	2	1	C	16	13	71	0	0	0	3	16	2.3	19.6
127	C12	1	2	2	F	5	0	94	0	0	0	N/A	5	25.1	11.5
128	C13	2	3	2	D	6	33	61	0	0	0	71	30	28	53
129	C14	1	2	2	C	53	0	48	0	0	0	0	41	0	121
130	C15	1	2	1	C	20	20	52	8.5	0	0	66	0	21.3	4.6
131	C16	4	4	1	A	13	20	56	0	11	13	42	54	9.6	2
132	C17	3	2	1	C	7	24	67	0.9	1	46	58	97	37	22.9
133	C18	1	1	1	D	36	20	39	0	5	0	13	50	10	29
134	C19	1	3	2	D	6	43	51	0	0	0	60	32	1	45
135	C20	1	1	1	B	17	22	54	1.1	5	0	93	123	20.6	23.1
136	C21	1	2	1	C	26	35	39	0.5	0	1	39	37	50.1	98.7
137	C22	1	1	1	A	27	23	32	1.5	15	14	75	138	31.5	27.1
138	C23	1	2	3	E	12	22	61	1.1	5	4	25	46	0	16.5
139	C24	1	2	1	D	7	19	74	0	0	0	11	39	19.5	62.3
140	C25	4	2	2	A	40	58	3	0	0	0	11	165	315	23.5

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscel- Assets 1982	% Non- Control- lable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn-Over %	1982 Stock Turn-Over %
141	C26	1	3	1	E	17	39	41	2.8	0	3	23	25	63.5	48.9
142	C27	1	2	1	E	9	20	71	0	0	0	19	34	8.6	75.7
143	C28	1	1	1	E	1	11	70	5.6	13	13	5	10	N/A	N/A
144	C29	1	2	2	C	12	31	53	3.6	0	7	68	160	90	80
145	C30	1	3	2	A	26	25	49	0	0	0	15	26	32	82
146	C31	1	2	2	E	11	17	57	0.4	14	0	40	47	14.1	18.2
147	C32	1	2	2	B	2	44	12	28	14	1	25	25	0	39
148	C33	5	2	2	E	19	37	44	0	0	0	35	38	2.4	4.4
149	C34	1	2	3	F	8	25	53	14	0	14	2	6	N/A	N/A
150	C35	1	2	1	C	18	1	43	5.5	33	2	3	35	2.3	42.1
151	C36	1	2	1	C	15	47	38	0	0	0	27	18	N/A	N/A
152	C37	1	2	2	E	19	60	21	0	0	0	20	14	N/A	N/A
153	C38	4	1	3	F	19	23	30	13	15	0	94	62	0	7
154	C39	3	2	2	C	19	38	37	0	1	0	28	40	187.5	98.3
155	C40	4	2	2	D	23	39	28	0	0	0	0	0	13.3	26.8
156	C41	1	3	2	E	33	23	64	2.8	3	5	45	54	0	11.4 ⁸⁰
157	C42	1	2	2	D	8	7	64	1.2	0	0	N/A	N/A	188	99
158	C43	4	1	1	B	27	0	66	0	0	0	0	15	0	67.6
159	C44	1	2	1	F	34	46	51	0	0	0	1	2	12.2	18.9
160	C45	1	2	1	F	3	41	54	0	0	0	58	59	47	12
161	C46	1	2	1	D	5	18	23	1	10	17	32	33	26.6	37.6
162	C47	4	2	2	D	48	55	40	0	0	0	64	32	0	36
163	C48	1	2	2	D	5	24	57	9	6	1	20	47	0	16
164	C49	1	2	1	B	4	49	50	0.2	0	1	N/A	N/A	N/A	N/A
165	C50	1	2	2	D	0	25	43	0	0	0	10	25	27.4	106.1
166	C51	1	2	1	F	32	14	58	0	0	0	2	17	0	20.1
167	C52	1	2	2	F	27	14	58	0	0	1	2	17	68.6	47.1
168	C53	1	2	2	F	1	48	51	0	0	1	17	47	1.5	17.1
169	C54	1	2	2	F	19	40	41	0	0	21	19	31	198	26
170	C55	1	3	2	A	13	37	33	7.4	9	14	81	88	0	3.2
171	C56	1	3	2	A	8	15	76	1	0	0	85	128	0	N/A
172	C57	1	3	2	A	3	28	60	4.6	4	0	57	85	N/A	N/A
173	C58	1	1	2	C	45	13	40	0	2	2	4	47	25	90
174	C59	3	2	1	D	8	0	81	1.4	11	12	N/A	N/A	N/A	N/A
175	C60	1	3	2	B	19	65	16	0	0	0	252	34	0.4	0
					B	14	20	56	10.1	0	2	43	80	29.1	34.1

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscellaneous Assets 1982	% Non-Controlable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn-Over %	1982 Stock Turn-Over %
176	C61	1	3	2	A	5	60	34	0	0	0	776	125	0.7	0
177	C62	2	3	2	D	5	24	71	0	0	0	39	16	2.9	4.4
178	C63	1	2	1	C	1	25	72	1	0	0	26	60	16.3	17.3
179	C64	1	2	3	E	0	93	7	0	0	0	16	5	63.8	0
180	C65	1	3	2	C	23	21	55	0	0	0	72	45	8.6	31.3
181	C66	1	2	1	D	7	41	44	0	8	2	17	49	151	72
182	C67	1	2	3	E	13	59	27	0	0	0	41	48	16.5	44.8
183	C68	1	2	2	A	5	29	58	8.6	0	1	N/A	N/A	N/A	N/A
184	C69	1	1	3	D	56	44	0	0	0	1	11	0	0	N/A
185	C70	1	2	3	D	24	11	49	2	14	1	4	44	N/A	15
186	C71	1	2	2	D	0	27	25	40.7	7	8	39	42	3.9	13
187	C72	1	3	1	A	2	38	50	9.4	0	0	57	59	N/A	N/A
188	C73	1	3	2	F	6	46	48	0	0	1	21	28	0	53.6
189	C74	1	2	2	D	17	6	11	51.3	16	11	32	83	0	30.6
190	C75	1	3	1	E	24	29	47	0	0	0	26	49	2.4	24.3
191	C76	1	2	1	D	16	42	41	0	0	0	17	35	31.8	100.5
192	C77	1	2	1	A	4	11	86	0	0	0	46	127	4.1	4.1
193	C78	1	2	1	D	14	38	38	0	11	11	19	42	19.9	26.6
194	C79	1	2	2	D	0	44	56	0	0	0	39	42	19.6	8.3
195	C80	1	2	1	F	3	39	55	2.7	0	0	N/A	N/A	N/A	N/A
196	C81	1	2	2	C	3	13	67	14	3	1	27	35	0	0.3
197	C82	1	2	2	B	14	18	68	0	0	1	N/A	N/A	31	36
198	C83	1	2	1	D	46	26	28	0	0	0	1	49	N/A	9.4
199	C84	1	2	2	C	17	56	27	0	0	0	81	69	12.8	11.3
200	C85	1	3	2	D	17	43	40	0	0	0	29	16	6.1	54.3
201	C86	1	3	2	D	13	53	34	0	0	0	59	10	4.8	4.8
202	C87	1	2	2	D	18	41	41	0	0	1	9	28	116	30
203	C88	1	2	1	D	24	29	28	0.2	19	25	32	31	0	9.7
204	C89	3	2	2	D	43	31	15	11	0	11	58	49	32	85
205	C90	1	2	2	C	39	39	23	0	0	0	N/A	N/A	N/A	N/A
206	C91	1	2	2	F	15	37	46	0	2	1	14	26	0	53.9
207	C92	2	2	2	E	27	43	22	6.7	1	10	30	24	3.1	4.6
208	C93	1	2	1	C	10	9	71	2.9	7	1	3	70	0	25.2
209	C94	1	2	2	D	5	3	15	46	31	13	13	55	1	24
210	C95	4	2	2	E	25	34	41	0	0	1	31	31	0	9.7

No.	Code Name	Pool Char	Pool Compos	Invest Object	Mkt Val Size	% Cash 1982	% Bonds 1982	% Stocks 1982	% Real Estate 1982	% Miscel- laneous Assets 1982	% Non- Control- lable Assets 1982	6/30/82 # Bonds	6/30/82 # Stocks	1982 Bond Turn- Over %	1982 Stock Turn- Over %
211	C96	2	2	1	A	18	39	40	2.5	1	5	68	53	51.1	67.2
212	C97	1	2	1	E	16	44	40	0	0	0	46	67	37.5	21.3
213	C98	1	3	1	D	5	19	72	2.8	1	5	11	25	73.7	66.7
214	C99	2	4	1	R	4	49	47	0	0	0	25	24	4.7	82.5
215	C100	3	2	2	D	58	19	22	0	0	0	19	16	37	85
216	C101	3	1	2	D	9	28	43	18.7	2	0	85	80	2.8	12.1
217	C102	1	1	1	D	0	28	65	0	7	6	39	122	149.8	51.9
218	C103	2	2	2	D	6	44	45	0	5	6	39	122	149.8	51.9
# Answering Average		218	218	218	218	218 15.4%	218 30.6%	218 48.1%	218 2.7%	218 3.2%	218 2.9%	193	197	171	176
												28	49	19.6%	28.0%

EXHIBIT III

DETAILED PERFORMANCE SUMMARYAVERAGE ANNUAL TOTAL RETURN

This exhibit shows in detail the average annual total return performance of all investment pools and various bond and equity indexes for the one-, three-, five-, and ten-year periods ending June 30, 1982. For example, investment pool C69 for the one-year period had a return of 15.69%, which was the highest return among all pools and indices in the 1982 Comparative Performance Study. This pool had an average annual return of 9.29% for the three-year period and ranked sixty-ninth, and 7.66% for the five-year period and ranked ninety-second, etc. Performance of pools is also ranked based on investment objective, investment size, and percentage in equity categories. Lastly, beta and efficiency measure ranking is shown for those pools with at least five years' data. The table below shows the number of pools participating based on the various groupings.

Number of Pools Participating

<u>Grouping - Ending June 30, 1982</u>	<u>1 Years</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>
Page 84 - All Pools	218	210	195	150
Page 90 - Total Return	88	87	79	63
Page 93 - Balanced or Income Oriented	130	123	116	87
Page 97 - Over \$50 Million	61	61	57	46
Page 99 - \$10-\$50 Million	100	97	89	69
Page 102 - Under \$10 Million	57	52	49	35
Page 104 - 65% Equity or More	52	49	45	35
Page 106 - 50% to 65% Equity	89	88	80	63
Page 108 - Under 50% Equity	77	73	70	52
Page 110 - Beta and Efficiency	N/A	N/A	176	127

1982 NACUBO COMPARATIVE PERFORMANCE STUDY
ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C69	0	D	15.69%	69	9.29%	92	7.66%		N/A%
2	C59	29	B	15.22	75	9.17		N/A		N/A
3	E7	48	F	14.64	42	10.83	67	8.44	143	2.31
4	C6	14	D	13.16	36	11.06	57	8.69	64	5.16
5	C7	8	A	12.90	23	11.85	51	9.10	122	3.61
6	C11	72	C	12.86	2	17.72		N/A		N/A
7	C60	57	B	12.38	33	11.15	29	10.47	19	7.50
8	C85	31	D	11.99	89	8.60	65	8.47	43	5.72
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
9	C30	43	E	10.70	38	10.96	62	8.49	47	5.60
10	C74	12	D	10.38	57	10.06	20	11.18	8	9.27
11	E87	5	F	9.79	205	2.59	192	2.74	103	4.12
12	C81	72	C	9.75	28	11.64		N/A		N/A
13	E58	43	D	9.60	140	7.09	145	6.03	33	6.15
14	C12	98	F	9.51	94	8.46	143	6.09		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
15	E106	29	E	8.77		N/A		N/A		N/A
16	E16	57	D	8.54	4	16.89	9	12.80	18	7.55
17	C67	27	E	8.42	116	7.74	114	7.08	94	4.52
18	E49	52	C	8.16	49	10.32	24	10.85	88	4.61
19	E68	56	C	8.02	65	9.59	63	8.48	101	4.20
20	C90	14	C	7.98		N/A		N/A		N/A
21	C37	24	F	7.77	188	4.58	181	4.25		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
22	C99	72	B	7.32	26	11.71	3	14.32	1	21.63
23	C65	51	C	7.16	13	13.80	23	10.96	10	8.45
24	E111	31	E	6.96		N/A		N/A		N/A
25	E82	38	F	6.43	113	7.79	121	6.72	46	5.66
26	E109	24	F	5.88	157	6.35	165	5.12	125	3.52
27	E80	25	C	5.57	63	9.61	33	10.14	52	5.49
28	C34	57	C	5.54	50	10.31	41	9.69	123	3.59
29	C86	38	D	5.31	82	8.79	78	8.22	15	7.66
30	E110	39	A	5.16	108	8.02	74	8.32		N/A
31	C22	41	A	5.14	37	10.99	45	9.51	60	5.31
32	C70	55	D	5.11	58	10.04	82	8.06	31	6.19
33	C38	33	C	5.04	87	8.61	53	9.06	12	8.04
34	C10	52	F	4.98	203	2.95	174	4.58		N/A
35	C83	33	D	4.85	107	8.04	77	8.24	96	4.38
36	C89	24	D	4.70	143	7.04	126	6.63		N/A
37	C61	39	A	4.63	181	5.10		N/A		N/A
38	C35	51	C	4.54	10	13.95	4	13.85	4	10.65
39	C88	32	D	4.43	66	9.53	79	8.14	50	5.54
40	E83	50	F	4.32	156	6.44	151	5.70	119	3.67

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	C92	23	E	4.30 %	134	7.29 %	111	7.16 %	110	3.90 %
42	E60	51	D	4.27	51	10.26	99	7.48	90	4.59
43	C9	51	A	3.81	95	8.44	110	7.18	53	5.49
44	E84	35	F	3.80	104	8.15	89	7.85		N/A
45	E35	59	C	3.80	97	8.36	103	7.40	133	3.12
46	E113	65	F	3.62		N/A		N/A		N/A
47	C64	20	E	3.44	158	6.33	160	5.39	55	5.40
48	E28	17	A	3.28	183	4.99	135	6.33	106	4.06
49	E51	47	C	3.10	47	10.44	25	10.69	24	6.84
50	E65	53	C	3.04	39	10.94	55	8.99	54	5.45
51	C50	48	F	3.02	121	7.50	117	6.87	78	4.77
52	E50	29	C	2.87	9	14.05	18	11.48	137	2.77
53	E22	38	D	2.82	198	3.53	187	3.79	83	4.70
54	C20	55	B	2.79	84	8.68	83	8.05	41	5.73
55	E20	46	C	2.68	17	13.18	37	9.99	22	7.39
56	E88	14	F	2.68	210	-1.36	195	0.53	121	3.66
57	E23	44	F	2.59	202	3.14	183	4.09	146	2.09
58	C62	70	D	2.58	207	2.29	189	3.46		N/A
59	C54	37	A	2.56	44	10.74	5	13.70	11	8.15
60	E115	66	E	2.53		N/A		N/A		N/A
61	C19	49	D	2.46	190	4.53	178	4.34		N/A
62	E93	57	B	2.35	16	13.19	27	10.57		N/A
63	E64	57	E	2.30	48	10.39	39	9.80	144	2.29
64	C21	39	C	2.23	85	8.67	149	5.76	138	2.70
65	C46	33	D	2.14	106	8.05	122	6.72	81	4.72
66	C44	57	F	2.12	14	13.29	10	12.66	44	5.69
67	C13	61	D	1.99	7	14.66	2	14.59	2	14.68
68	C36	41	E	1.94	175	5.51	163	5.19		N/A
69	E9	32	E	1.83	195	4.03	171	4.82		N/A
70	E41	40	E	1.77	189	4.54	184	4.07	142	2.34
71	E96	49	B	1.72	71	9.24	88	7.85		N/A
72	E59	44	D	1.65	83	8.78	102	7.41	84	4.68
73	C95	43	E	1.40	78	9.04	87	7.89	56	5.38
74	C18	40	D	1.38	32	11.21	35	10.04	7	9.53
75	C15	54	A	1.36	24	11.80	31	10.20	74	4.92
76	C101	50	D	1.29		N/A		N/A		N/A
77	C75	56	E	1.25	132	7.33	128	6.61	95	4.46
78	E27	54	B	1.10	40	10.89	60	8.54	89	4.59
79	C72	48	A	1.09	125	7.45	109	7.22	13	7.90
80	C58	79	D	1.07	81	8.81	90	7.82	127	3.45
81	C55	77	A	1.05	43	10.81	43	9.59	14	7.76
82	E98	61	F	0.98	46	10.52	50	9.10	36	5.95
83	C17	69	C	0.93	130	7.38	154	5.58	70	5.04
84	E8	54	A	0.91	25	11.74	38	9.94	51	5.50
85	C73	50	F	0.70	159	6.32	162	5.33		N/A

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

CODE NAME	EQ #*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
86 C43	67	F	0.67 %	6	16.03 %	19	11.48 %		N/A %
87 E100	59	B	0.59	147	6.87	140	6.13		N/A
88 C5	30	D	0.56	168	5.88	137	6.25	58	5.34
89 E29	63	A	0.53	60	9.95	69	8.41	104	4.08
90 E70	63	D	0.52	76	9.14	66	8.46		N/A
91 C1	67	D	0.31	120	7.61	129	6.56		N/A
92 E32	47	C	0.29	141	7.08	142	6.10	79	4.76
93 E48	52	E	0.18	119	7.68	46	9.36		N/A
94 E78	44	D	0.18	185	4.95	173	4.63	85	4.68
95 E114	33	E	0.14	99	8.29	176	4.42	77	4.81
96 E74	59	D	0.05	161	6.15		N/A		N/A
97 C49	51	D	0.01	196	3.98	180	4.26	145	2.23
98 C94	17	D	-0.06	105	8.11	48	9.25		N/A
99 E1	55	A	-0.08	34	11.12	47	9.29	124	3.56
100 C103	49	D	-0.15	124	7.46		N/A		N/A
101 E13	35	D	-0.30	201	3.18	188	3.61	92	4.57
102 E61	64	D	-0.33	96	8.40	125	6.66		N/A
103 C80	60	F	-0.40	111	7.85	138	6.23	126	3.46
104 E90	51	A	-0.42	178	5.47	161	5.37		N/A
105 E31	44	A	-0.47	165	5.94	150	5.70		N/A
106 E18	68	A	-0.51	127	7.43	112	7.13	107	4.05
107 E57	55	A	-0.57	93	8.47	94	7.56	37	5.81
108 C33	48	F	-0.60	204	2.59	191	2.85		N/A
109 C91	51	F	-0.65	200	3.36	185	4.06	132	3.30
110 C100	39	D	-0.79	135	7.27	123	6.69		N/A
111 E73	50	A	-0.79	133	7.29	124	6.68	76	4.84
112 C57	46	C	-0.81	53	10.20	85	7.99	147	1.81
113 C3	57	B	-0.86	184	4.97	179	4.29	105	4.06
114 C41	66	D	-0.87	163	6.07	107	7.33	30	6.27
115 C47	45	D	-0.95	199	3.48	190	3.33	111	3.88
116 E89	37	B	-1.01	5	16.19	17	11.57		N/A
117 E104	60	F	-1.01	109	8.00		N/A		N/A
118 C56	59	A	-1.14	86	8.63	61	8.50	59	5.32
119 E39	52	D	-1.20	176	5.51	159	5.39	128	3.41
120 E72	58	B	-1.22	100	8.25	95	7.55	48	5.58
121 E47	60	B	-1.22	142	7.06		N/A		N/A
122 E44	50	F	-1.24	148	6.86	157	5.47	118	3.71
123 E66	55	C	-1.24	110	8.00	100	7.42		N/A
124 E2	62	D	-1.24	164	6.04	115	7.03	112	3.77
125 C29	57	A	-1.30	70	9.29	97	7.52	91	4.59
126 E6	51	B	-1.31	54	10.15	81	8.07	34	6.01
127 E103	61	E	-1.32	90	8.53		N/A		N/A
128 E42	54	E	-1.32	64	9.61	84	7.99	42	5.73
129 C16	57	C	-1.38	166	5.94	164	5.17	129	3.32

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
130	C8	57	B	-1.46%	68	9.42%	86	7.94%		N/A%
131	E85	44	C	-1.48	137	7.17	116	6.94		N/A
132	C96	44	A	-1.52	187	4.71	120	6.77		N/A
133	C39	45	D	-1.52	171	5.74	152	5.62	148	1.62
134	C79	57	D	-1.62	191	4.44	175	4.44	115	3.74
135	E37	48	B	-1.72	55	10.14	54	9.01	26	6.65
136	C23	56	E	-1.75	1	20.03	6	13.51	35	5.97
137	E95	50	C	-2.01	151	6.70	141	6.11	131	3.30
138	C68	60	A	-2.13	179	5.18		N/A		N/A
139	E24	62	D	-2.27	153	6.59	132	6.49	38	5.78
140	E91	53	F	-2.31	131	7.33	131	6.52	49	5.55
141	C97	44	E	-2.40	118	7.69	194	1.12	109	3.91
142	E67	65	C	-2.44	162	6.10	147	5.92	65	5.15
143	E99	53	D	-2.45	21	12.47	11	12.45		N/A
144	C32	13	E	-2.66	170	5.82	21	11.06	3	11.06
145	E63	59	A	-3.00	91	8.52	64	8.48	114	3.76
146	E69	64	B	-3.00	182	5.01	156	5.54	150	0.68
147	E92	61	F	-3.20	172	5.73	168	5.01	28	6.51
148	C52	51	F	-3.24	174	5.54	146	5.98	66	5.07
149	C71	27	D	-3.39	155	6.48	104	7.37		N/A
150	C78	42	D	-3.45	197	3.96	177	4.37	149	1.30
151	E55	63	C	-3.48	150	6.73		N/A		N/A
152	E17	60	B	-3.65	180	5.15	169	4.99	63	5.18
153	C14	58	C	-3.74	8	14.54	14	12.31		N/A
154	C53	48	F	-3.78	144	7.02	101	7.41		N/A
155	E53	67	B	-3.78	73	9.22	59	8.62	23	6.96
156	C45	62	D	-3.83	122	7.49		N/A		N/A
157	C76	52	D	-4.01	67	9.51	106	7.35	97	4.32
158	E62	68	E	-4.08	102	8.24	91	7.67	67	5.06
159	E14	66	D	-4.33	177	5.51	153	5.60	73	4.94
160	C2	50	B	-4.38	128	7.42	113	7.10	71	5.01
161	E10	67	D	-4.40	152	6.69	136	6.31	140	2.48
162	E36	60	A	-4.47	31	11.28	36	10.01	57	5.34
163	C31	59	B	-4.51	45	10.65	119	6.78		N/A
164	E105	65	F	-4.63	59	10.00		N/A		N/A
165	E81	47	D	-4.72	79	8.87	130	6.54	136	2.99
166	C82	70	B	-4.91	80	8.81	70	8.39	134	3.09
167	E77	55	F	-4.91	192	4.18	167	5.01	113	3.76
168	E71	57	C	-5.13	169	5.84	155	5.58	93	4.55
169	E79	59	D	-5.26	112	7.81	93	7.57	86	4.63
170	C42	70	B	-5.50	72	9.24	80	8.11	120	3.67
171	E40	67	A	-5.57	41	10.87	68	8.42	69	5.06
172	C28	76	C	-5.62	30	11.29	22	11.06		N/A
173	E45	56	A	-5.69	61	9.72	52	9.09	27	6.63

ALL ENDOWMENT POOLS
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
174 E108	59	C	-5.70 %	173	5.59 %	170	4.92 %	75	4.89 %
175 E30	62	A	-5.93	20	12.89	49	9.12	80	4.76
176 E11	17	A	-6.00	35	11.12	32	10.16	40	5.78
177 C66	59	D	-6.28	12	13.82	16	11.68		N/A
178 E97	64	F	-6.29	194	4.12	166	5.06	29	6.43
179 E4	67	D	-6.59	167	5.89	127	6.63	135	3.02
180 E86	64	D	-6.86	154	6.51		N/A		N/A
181 E21	65	A	-7.24	98	8.33	73	8.32	108	3.95
182 C98	62	D	-7.28	129	7.38	42	9.60	6	9.97
183 E107	66	F	-7.37	193	4.17	172	4.76	72	4.95
184 E76	65	F	-7.37	149	6.76	144	6.08	98	4.26
185 C84	29	C	-7.64	208	-0.02	193	1.57	139	2.51
186 E38	66	A	-7.70	103	8.18	98	7.50	32	6.15
187 E46	80	A	-7.81	123	7.48	96	7.54	102	4.20
188 C87	53	D	-7.96	74	9.21	75	8.27	141	2.43
189 E33	75	A	-7.96	101	8.25	56	8.79	99	4.25
190 C4	81	C	-8.62	139	7.13	118	6.78		N/A
191 C102	71	D	-8.68	136	7.20		N/A		N/A
192 E56	59	B	-8.80	146	6.92	134	6.38	117	3.72
193 C26	47	E	-8.81		N/A		N/A		N/A
194 E12	59	F	-8.97	29	11.59	44	9.52		N/A
195 C25	12	A	-9.03	92	8.52	71	8.38	20	7.46
196 E102	72	D	-9.65	3	17.37	1	17.35	9	9.23
197 C93	77	C	-9.82	88	8.60	72	8.34	17	7.56
198 E19	71	B	-9.91	62	9.66	30	10.46	61	5.27
199 C48	60	B	-10.02	56	10.12	26	10.66		N/A
200 E3	68	D	-10.64	186	4.80	148	5.81	100	4.23
201 E101	73	D	-10.85	117	7.73	108	7.28		N/A
202 E52	77	D	-10.95	138	7.13	139	6.18	116	3.74
D-JONES			-11.70		4.88		3.45		3.70
SP500			-11.76		7.68		7.19		4.79
203 E54	71	C	-11.85	18	13.01	7	13.24	45	5.66
204 E43	72	C	-11.89	115	7.74	40	9.74	16	7.63
205 C77	89	A	-12.40	114	7.78	76	8.26	21	7.46
SP-IND			-12.64		7.63		7.21		4.49
COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
206 E5	76	B	-13.28	19	13.01	13	12.37	68	5.06
207 E34	70	A	-13.35	27	11.70	28	10.50	87	4.61
208 C63	77	C	-13.49	22	11.91	12	12.39	62	5.24
209 E25	80	D	-13.52	15	13.25	15	12.09	39	5.78
210 C24	80	D	-13.79	145	6.93	105	7.36		N/A
211 C27	79	E	-13.81	209	-1.03	186	3.97		N/A
212 E26	74	D	-14.05	77	9.12	34	10.08	82	4.71
213 E75	74	C	-14.53	126	7.44	133	6.46	25	6.69

ALL ENDOWMENT POOLS
 AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
 FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ #*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
214	C40	51	E	-14.61%	52	10.25%	58	8.65%	5	10.32%
215	E112	72	C	-14.72		N/A		N/A		N/A
216	E94	73	D	-15.35	11	13.93	8	12.92		N/A
217	E15	49	C	-15.61	160	6.28	158	5.46	130	3.31
218	C51	59	F	-16.53	206	2.30	182	4.15		N/A
AVERAGE		218		-0.93%	210	8.31%	195	7.70%	150	5.21%

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E7	48	F	14.64%	28	10.83%	39	8.44%	60	2.31%
2	C7	8	A	12.90	16	11.85	32	9.10	46	3.61
3	C11	72	C	12.86	1	17.72		N/A		N/A
	COM-FDRD	0	A	10.98		0.10		2.30		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
4	E16	57	D	8.54	2	16.89	4	12.80	6	7.55
5	E49	52	C	8.16	32	10.32	15	10.85	31	4.61
6	E68	56	C	8.02	40	9.59	37	8.48	38	4.20
	SALOMON			7.43		-3.85		-1.23		2.76
7	C99	72	B	7.32	19	11.71	1	14.32	1	21.63
8	E109	24	F	5.88	76	6.35	75	5.12	49	3.52
9	C34	57	C	5.54	33	10.31	27	9.69	47	3.59
10	C22	41	A	5.14	25	10.99	29	9.51	23	5.31
11	C10	52	F	4.98	86	2.95	76	4.58		N/A
12	C83	33	D	4.85	53	8.04	45	8.24	34	4.38
13	C35	51	C	4.54	6	13.95	2	13.85	2	10.65
14	E51	47	C	3.10	30	10.44	16	10.69	9	6.84
15	E65	53	C	3.04	26	10.94	35	8.99	21	5.45
16	C50	48	F	3.02	59	7.50	58	6.87	30	4.77
17	E50	29	C	2.87	5	14.05	13	11.48	57	2.77
18	C20	55	B	2.79	47	8.68	47	8.05	17	5.73
19	E20	46	C	2.68	11	13.18	24	9.99	8	7.39
20	E93	57	B	2.35	10	13.19	18	10.57		N/A
21	E64	57	E	2.30	31	10.39	26	9.80	61	2.29
22	C44	57	F	2.12	8	13.29	5	12.66	18	5.69
23	C18	40	D	1.38	22	11.21	22	10.04	4	9.53
24	C15	54	A	1.36	17	11.80	20	10.20	29	4.92
25	C75	56	E	1.25	65	7.33	62	6.61	33	4.46
26	C58	79	D	1.07	46	8.81	50	7.82	51	3.45
27	E98	61	F	0.98	29	10.52	33	9.10	13	5.95
28	E8	54	A	0.91	18	11.74	25	9.94	20	5.50
29	C43	67	F	0.67	3	16.03	12	11.48		N/A
30	E29	63	A	0.53	37	9.95	41	8.41	39	4.08
31	E48	52	E	0.18	58	7.68	30	9.36		N/A
32	E74	59	D	0.05	77	6.15		N/A		N/A
33	E1	55	A	-0.08	24	11.12	31	9.29	48	3.56
34	E61	64	D	-0.33	50	8.40	60	6.66		N/A
35	C80	60	F	-0.40	55	7.85	67	6.23	50	3.46
36	E18	68	A	-0.51	62	7.43	56	7.13	41	4.05
37	C57	46	C	-0.81	34	10.20	48	7.99	62	1.81
38	C3	57	B	-0.86	83	4.97	77	4.29	40	4.06
39	E39	52	D	-1.20	81	5.51	73	5.39	52	3.41
40	E47	60	B	-1.22	68	7.06		N/A		N/A

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E66	55	C	-1.24%	54	8.00%	52	7.42%		N/A%
42	C16	57	C	-1.38	78	5.94	74	5.17	53	3.32
43	C8	57	B	-1.46	42	9.42	49	7.94		N/A
44	C96	44	A	-1.52	85	4.71	59	6.77		N/A
45	E95	50	C	-2.01	71	6.70	69	6.11	54	3.30
46	E24	62	D	-2.27	73	6.59	64	6.49	16	5.78
47	C97	44	E	-2.40	57	7.69	79	1.12	42	3.91
48	E99	53	D	-2.45	14	12.47	6	12.45		N/A
49	E63	59	A	-3.00	49	8.52	38	8.48	43	3.76
50	E69	64	B	-3.00	82	5.01	72	5.54	63	0.68
51	C71	27	D	-3.39	75	6.48	53	7.37		N/A
52	E55	63	C	-3.48	70	6.73		N/A		N/A
53	C14	58	C	-3.74	4	14.54	9	12.31		N/A
54	C45	62	D	-3.83	60	7.49		N/A		N/A
55	C76	52	D	-4.01	41	9.51	55	7.35	35	4.32
56	C2	50	B	-4.38	63	7.42	57	7.10	28	5.01
57	E10	67	D	-4.40	72	6.69	66	6.31	58	2.48
58	E36	60	A	-4.47	21	11.28	23	10.01	22	5.34
59	E105	65	F	-4.63	36	10.00		N/A		N/A
60	E81	47	D	-4.72	45	8.87	63	6.54	56	2.99
61	E71	57	C	-5.13	80	5.84	71	5.58	32	4.55
62	C42	70	B	-5.50	43	9.24	46	8.11	45	3.67
63	E40	67	A	-5.57	27	10.87	40	8.42	26	5.06
64	C28	76	C	-5.62	20	11.29	14	11.06		N/A
65	E45	56	A	-5.69	38	9.72	34	9.09	11	6.63
66	E11	17	A	-6.00	23	11.12	21	10.16	15	5.78
67	C66	59	D	-6.28	7	13.82	11	11.68		N/A
68	E4	67	D	-6.59	79	5.89	61	6.63	55	3.02
69	E86	64	D	-6.86	74	6.51		N/A		N/A
70	C98	62	D	-7.28	64	7.38	28	9.60	3	9.97
71	E38	66	A	-7.70	52	8.18	51	7.50	12	6.15
72	C87	53	D	-7.96	44	9.21	43	8.27	59	2.43
73	E33	75	A	-7.96	51	8.25	36	8.79	36	4.25
74	C102	71	D	-8.68	66	7.20		N/A		N/A
75	C26	47	E	-8.81		N/A		N/A		N/A
76	C93	77	C	-9.82	48	8.60	42	8.34	5	7.56
77	E19	71	B	-9.91	39	9.66	19	10.46	24	5.27
78	C48	60	B	-10.02	35	10.12	17	10.66		N/A
79	E3	68	D	-10.64	84	4.80	70	5.81	37	4.23
80	E52	77	D	-10.95	67	7.13	68	6.18	44	3.74
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
81	E54	71	C	-11.85	12	13.01	3	13.24	19	5.66
82	C77	89	A	-12.40	56	7.78	44	8.26	7	7.46
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35

POOLS WITH A
TOTAL RETURN INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
83	E5	76	B	-13.28 %	13	13.01 %	8	12.37 %	27	5.06 %
84	C63	77	C	-13.49	15	11.91	7	12.39	25	5.24
85	E25	80	D	-13.52	9	13.25	10	12.09	14	5.78
86	C24	80	D	-13.79	69	6.93	54	7.36		N/A
87	C27	79	E	-13.81	87	-1.03	78	3.97		N/A
88	E75	74	C	-14.53	61	7.44	65	6.46	10	6.69
AVERAGE		88		-2.17 %	87	9.29 %	79	8.62 %	63	5.07 %

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C69	0	D	15.69%	27	9.29%	42	7.66%		N/A%
2	C59	29	B	15.22	31	9.17		N/A		N/A
3	C6	14	D	13.16	12	11.06	21	8.69	39	5.16
4	C60	57	B	12.38	11	11.15	11	10.47	13	7.50
5	C85	31	D	11.99	41	8.60	27	8.47	26	5.72
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
6	C30	43	E	10.70	13	10.96	26	8.49	28	5.60
7	C74	12	D	10.38	22	10.06	7	11.18	4	9.27
8	E87	5	F	9.79	118	2.59	114	2.74	65	4.12
9	C81	72	C	9.75	9	11.64		N/A		N/A
10	E58	43	D	9.60	73	7.09	76	6.03	21	6.15
11	C12	88	F	9.51	45	8.46	74	6.09		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
12	E106	29	E	8.77		N/A		N/A		N/A
13	C67	27	E	8.42	59	7.74	57	7.08	62	4.52
14	C90	14	C	7.98		N/A		N/A		N/A
15	C37	24	F	7.77	103	4.58	04	4.25		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
16	C65	51	C	7.16	6	13.80	9	10.96	6	8.45
17	E111	31	E	6.96		N/A		N/A		N/A
18	E82	38	F	6.43	58	7.79	63	6.72	27	5.66
19	E80	25	C	5.57	24	9.61	12	10.14	32	5.49
20	C86	38	D	5.31	36	8.79	33	8.22	11	7.66
21	E110	39	A	5.16	55	8.02	32	8.32		N/A
22	C70	55	D	5.11	23	10.04	36	8.06	20	6.19
23	C38	33	C	5.04	40	8.61	19	9.06	8	8.04
24	C89	24	D	4.70	75	7.04	66	6.63		N/A
25	C61	39	A	4.63	100	5.10		N/A		N/A
26	C88	32	D	4.43	26	9.53	34	8.14	31	5.54
27	E83	50	F	4.32	81	6.44	81	5.70	75	3.67
28	C92	23	E	4.30	69	7.29	56	7.16	68	3.90
29	E60	51	D	4.27	18	10.26	48	7.48	58	4.59
30	C9	51	A	3.81	46	8.44	55	7.18	33	5.49
31	E35	59	C	3.80	47	8.36	51	7.40	79	3.12
32	E84	35	F	3.80	52	8.15	39	7.85		N/A
33	E113	65	F	3.62		N/A		N/A		N/A
34	C64	20	E	3.44	82	6.33	87	5.39	34	5.40
35	E28	17	A	3.28	101	4.99	70	6.33	66	4.06
36	E22	38	D	2.82	113	3.53	109	3.79	53	4.70
37	E88	14	F	2.68	123	-1.36	116	0.53	76	3.66
38	E23	44	F	2.59	117	3.14	106	4.09	85	2.09
39	C62	70	D	2.58	121	2.29	111	3.46		N/A
40	C54	37	A	2.56	16	10.74	3	13.70	7	8.15

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ Z*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E115	66	E	2.53%		N/A%		N/A%		N/A%
42	C19	49	D	2.46	105	4.53	102	4.34		N/A
43	C21	39	C	2.23	38	8.67	79	5.76	81	2.70
44	C46	33	D	2.14	54	8.05	62	6.72	51	4.72
45	C13	61	D	1.99	4	14.66	2	14.59	1	14.68
46	C36	41	E	1.94	96	5.51	90	5.19		N/A
47	E9	32	E	1.83	110	4.03	96	4.82		N/A
48	E41	40	E	1.77	104	4.54	107	4.07	83	2.34
49	E96	49	B	1.72	29	9.24	40	7.85		N/A
50	E59	44	D	1.65	37	8.78	50	7.41	54	4.68
51	C95	43	E	1.40	34	9.04	38	7.89	35	5.38
52	C101	50	D	1.29		N/A		N/A		N/A
53	E27	54	B	1.10	14	10.89	24	8.54	60	4.59
54	C72	48	A	1.09	65	7.45	54	7.22	9	7.90
55	C55	77	A	1.05	15	10.81	15	9.59	10	7.76
56	C17	69	C	0.93	66	7.38	84	5.58	43	5.04
57	C73	50	F	0.70	83	6.32	89	5.33		N/A
58	E100	59	B	0.59	78	6.87	72	6.13		N/A
59	C5	30	D	0.56	89	5.88	71	6.25	36	5.34
60	E70	63	D	0.52	32	9.14	28	8.46		N/A
61	C1	67	D	0.31	62	7.61	67	6.56		N/A
62	E32	47	C	0.29	74	7.08	73	6.10	49	4.76
63	E78	44	D	0.18	102	4.95	98	4.63	55	4.68
64	E114	33	E	0.14	49	8.29	100	4.42	48	4.81
65	C49	51	D	0.01	111	3.98	103	4.26	84	2.23
66	C94	17	D	-0.06	53	8.11	17	9.25		N/A
67	C103	49	D	-0.15	64	7.46		N/A		N/A
68	E13	35	D	-0.30	116	3.18	110	3.61	61	4.57
69	E90	51	A	-0.42	97	5.47	88	5.37		N/A
70	E31	44	A	-0.47	88	5.94	80	5.70		N/A
71	E57	55	A	-0.57	44	8.47	44	7.56	24	5.81
72	C33	48	F	-0.60	119	2.59	113	2.85		N/A
73	C91	51	F	-0.65	115	3.36	108	4.06	78	3.30
74	C100	39	D	-0.79	70	7.27	64	6.69		N/A
75	E73	50	A	-0.79	68	7.29	65	6.68	47	4.84
76	C41	66	D	-0.87	86	6.07	52	7.33	19	6.27
77	C47	45	D	-0.95	114	3.48	112	3.33	69	3.88
78	E89	37	B	-1.01	3	16.19	6	11.57		N/A
79	E104	60	F	-1.01	56	8.00		N/A		N/A
80	C56	59	A	-1.14	39	8.63	25	8.50	37	5.32

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
81	E72	58	B	-1.22%	50	8.25%	45	7.55%	29	5.58%
82	E2	62	D	-1.24	87	6.04	58	7.03	70	3.77
83	E44	50	F	-1.24	79	6.86	85	5.47	74	3.71
84	C29	57	A	-1.30	28	9.29	47	7.52	59	4.59
85	E6	51	B	-1.31	20	10.15	35	8.07	22	6.01
86	E103	61	E	-1.32	42	8.53		N/A		N/A
87	E42	54	E	-1.32	25	9.61	37	7.99	25	5.73
88	E85	44	C	-1.48	71	7.17	59	6.94		N/A
89	C39	45	D	-1.52	91	5.74	82	5.62	86	1.62
90	C79	57	D	-1.62	106	4.44	99	4.44	72	3.74
91	E37	48	B	-1.72	21	10.14	20	9.01	16	6.65
92	C23	56	E	-1.75	1	20.03	4	13.51	23	5.97
93	C68	60	A	-2.13	98	5.18		N/A		N/A
94	E91	53	F	-2.31	67	7.33	68	6.52	30	5.55
95	E67	65	C	-2.44	85	6.10	78	5.92	40	5.15
96	C32	13	E	-2.66	90	5.82	8	11.06	2	11.06
97	E92	61	F	-3.20	92	5.73	93	5.01	17	6.51
98	C52	51	F	-3.24	94	5.54	77	5.98	41	5.07
99	C78	42	D	-3.45	112	3.96	101	4.37	87	1.30
100	E17	60	B	-3.65	99	5.15	94	4.99	38	5.18
101	E53	67	B	-3.78	30	9.22	23	8.62	15	6.96
102	C53	48	F	-3.78	76	7.02	49	7.41		N/A
103	E62	68	E	-4.08	51	8.24	41	7.67	42	5.06
104	E14	66	D	-4.33	95	5.51	83	5.60	45	4.94
105	C31	59	B	-4.51	17	10.65	60	6.78		N/A
106	C82	70	B	-4.91	35	8.81	29	8.39	80	3.09
107	E77	55	F	-4.91	107	4.18	92	5.01	71	3.76
108	E79	59	D	-5.26	57	7.81	43	7.57	56	4.63
109	E108	59	C	-5.70	93	5.59	95	4.92	46	4.89
110	E30	62	A	-5.93	7	12.89	18	9.12	50	4.76
111	E97	64	F	-6.29	109	4.12	91	5.06	18	6.43
112	E21	65	A	-7.24	48	8.33	31	8.32	67	3.95
113	E76	65	F	-7.37	80	6.76	75	6.08	63	4.26
114	E107	66	F	-7.37	108	4.17	97	4.76	44	4.95
115	C84	29	C	-7.64	122	-0.02	115	1.57	82	2.51
116	E46	80	A	-7.81	63	7.48	46	7.54	64	4.20
117	C4	81	C	-8.62	72	7.13	61	6.78		N/A
118	E56	59	B	-8.80	77	6.92	69	6.38	73	3.72
119	E12	59	F	-8.97	10	11.59	16	9.52		N/A
120	C25	12	A	-9.03	43	8.52	30	8.38	14	7.46
121	E102	72	D	-9.65	2	17.37	1	17.35	5	9.23
122	E101	73	D	-10.85	61	7.73	53	7.28		N/A
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79

POOLS WITH A
BALANCED OR INCOME INVESTMENT OBJECTIVE
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
123	E43	72	C	-11.89%	60	7.74%	14	9.74%	12	7.63%
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
124	E34	70	A	-13.35	8	11.70	10	10.50	57	4.61
125	E26	74	D	-14.05	33	9.12	13	10.08	52	4.71
126	C40	51	E	-14.61	19	10.25	22	8.65	3	10.32
127	E112	72	C	-14.72		N/A		N/A		N/A
128	E94	73	D	-15.35	5	13.93	5	12.92		N/A
129	E15	49	C	-15.61	84	6.28	86	5.46	77	3.31
130	C51	59	F	-16.53	120	2.30	105	4.15		N/A
AVERAGE		130		-0.10%	123	7.62%	116	7.07%	87	5.31%

INVESTMENT POOLS OVER \$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C59	29	B	15.22%	31	9.17%		N/A%		N/A%
2	C7	8	A	12.90	5	11.85	18	9.10	43	3.61
3	C60	57	B	12.38	11	11.15	8	10.47	5	7.50
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
4	C99	72	B	7.32	8	11.71	1	14.32	1	21.63
5	E110	39	A	5.16	43	8.02	31	8.32		N/A
6	C22	41	A	5.14	14	10.99	15	9.51	21	5.31
7	C61	39	A	4.63	57	5.10		N/A		N/A
8	C9	51	A	3.81	38	8.44	44	7.18	18	5.49
9	E28	17	A	3.28	59	4.99	51	6.33	36	4.06
10	C20	55	B	2.79	33	8.68	35	8.05	15	5.73
11	C54	37	A	2.56	18	10.74	2	13.70	2	8.15
12	E93	57	B	2.35	2	13.19	6	10.57		N/A
13	E96	49	B	1.72	28	9.24	37	7.85		N/A
14	C15	54	A	1.36	6	11.80	10	10.20	27	4.92
15	E27	54	B	1.10	15	10.89	23	8.54	32	4.59
16	C72	48	A	1.09	46	7.45	43	7.22	3	7.90
17	C55	77	A	1.05	17	10.81	14	9.59	4	7.76
18	E8	54	A	0.91	7	11.74	13	9.94	17	5.50
19	E100	59	B	0.59	52	6.87	52	6.13		N/A
20	E29	63	A	0.53	23	9.95	27	8.41	35	4.08
21	E1	55	A	-0.08	12	11.12	16	9.29	44	3.56
22	E90	51	A	-0.42	54	5.47	55	5.37		N/A
23	E31	44	A	-0.47	53	5.94	53	5.70		N/A
24	E18	68	A	-0.51	47	7.43	45	7.13	38	4.05
25	E57	55	A	-0.57	37	8.47	38	7.56	13	5.81
26	E73	50	A	-0.79	49	7.29	49	6.68	28	4.84
27	C3	57	B	-0.86	60	4.97	57	4.29	37	4.06
28	E89	37	B	-1.01	1	16.19	4	11.57		N/A
29	C56	59	A	-1.14	34	8.63	24	8.50	20	5.32
30	E47	60	B	-1.22	50	7.06		N/A		N/A
31	E72	58	B	-1.22	41	8.25	39	7.55	16	5.58
32	C29	57	A	-1.30	27	9.29	41	7.52	31	4.59
33	E6	51	B	-1.31	20	10.15	34	8.07	12	6.01
34	C8	57	B	-1.46	26	9.42	36	7.94		N/A
35	C96	44	A	-1.52	61	4.71	48	6.77		N/A
36	E37	48	B	-1.72	21	10.14	20	9.01	9	6.65
37	C68	60	A	-2.13	55	5.18		N/A		N/A
38	E69	64	B	-3.00	58	5.01	54	5.54	46	0.68
39	E63	59	A	-3.00	35	8.52	25	8.48	40	3.76
40	E17	60	B	-3.65	56	5.15	56	4.99	23	5.18
41	E53	67	B	-3.78	30	9.22	22	8.62	8	6.96
42	C2	50	B	-4.38	48	7.42	46	7.10	26	5.01
43	E36	60	A	-4.47	10	11.28	12	10.01	19	5.34
44	C31	59	B	-4.51	19	10.65	47	6.78		N/A

INVESTMENT POOLS OVER \$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
45	C82	70	B	-4.91%	32	8.81%	28	8.39%	45	3.09%
46	C42	70	B	-5.50	29	9.24	33	8.11	42	3.67
47	E40	67	A	-5.57	16	10.87	26	8.42	25	5.06
48	E45	56	A	-5.69	24	9.72	19	9.09	10	6.63
49	E30	62	A	-5.93	4	12.89	17	9.12	29	4.76
50	E11	17	A	-6.00	13	11.12	11	10.16	14	5.78
51	E21	65	A	-7.24	39	8.33	30	8.32	39	3.95
52	E38	66	A	-7.70	42	8.18	42	7.50	11	6.15
53	E46	80	A	-7.81	45	7.48	40	7.54	34	4.20
54	E33	75	A	-7.96	40	8.25	21	8.79	33	4.25
55	E56	59	B	-8.80	51	6.92	50	6.38	41	3.72
56	C25	12	A	-9.03	36	8.52	29	8.38	7	7.46
57	E19	71	B	-9.91	25	9.66	9	10.46	22	5.27
58	C48	60	B	-10.02	22	10.12	5	10.66		N/A
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
59	C77	89	A	-12.40	44	7.78	32	8.26	6	7.46
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
60	E5	76	B	-13.28	3	13.01	3	12.37	24	5.06
61	E34	70	A	-13.35	9	11.70	7	10.50	30	4.61
AVERAGE				-1.63%	61	9.05%	57	8.46%	46	5.54%

INVESTMENT POOLS \$10-\$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C69	0	D	15.69%	32	9.29%	40	7.66%		N/A%
2	C6	14	D	13.16	19	11.06	28	8.69	28	5.16
3	C11	72	C	12.86	1	17.72		N/A		N/A
4	C85	31	D	11.99	43	8.60	30	8.47	21	5.72
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
5	C74	12	D	10.38	26	10.06	13	11.18	5	9.27
6	C81	72	C	9.75	16	11.64		N/A		N/A
7	E58	43	D	9.60	64	7.09	68	6.03	18	6.15
	LEH-KUHN			9.04		-1.18		0.64		N/A
8	E16	57	D	8.54	3	16.89	6	12.80	12	7.55
9	E49	52	C	8.16	22	10.32	16	10.85	40	4.61
10	E68	56	C	8.02	29	9.59	29	8.48	47	4.20
11	C90	14	C	7.98		N/A		N/A		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
12	C65	51	C	7.16	10	13.80	15	10.96	7	8.45
13	E80	25	C	5.57	28	9.61	18	10.14	24	5.49
14	C34	57	C	5.54	23	10.31	23	9.69	52	3.59
15	C86	38	D	5.31	38	8.79	35	8.22	9	7.66
16	C70	55	D	5.11	27	10.04	37	8.06	17	6.19
17	C38	33	C	5.04	41	8.61	26	9.06	8	8.04
18	C83	33	D	4.85	48	8.04	34	8.24	44	4.38
19	C89	24	D	4.70	66	7.04	57	6.63		N/A
20	C35	51	C	4.54	7	13.95	3	13.85	2	10.65
21	C88	32	D	4.43	30	9.53	36	8.14	23	5.54
22	E60	51	D	4.27	24	10.26	42	7.48	41	4.59
23	E35	59	C	3.80	45	8.36	45	7.40	58	3.12
24	E51	47	C	3.10	21	10.44	17	10.69	14	6.84
25	E65	53	C	3.04	20	10.94	27	8.99	25	5.45
26	E50	29	C	2.87	6	14.05	12	11.48	61	2.77
27	E22	38	D	2.82	93	3.53	85	3.79	36	4.70
28	E20	46	C	2.68	12	13.18	21	9.99	13	7.39
29	C62	70	D	2.58	96	2.29	87	3.46		N/A
30	C19	49	D	2.46	89	4.53	83	4.34		N/A
31	C21	39	C	2.23	40	8.67	71	5.76	62	2.70
32	C46	33	D	2.14	47	8.05	54	6.72	34	4.72
33	C13	61	D	1.99	4	14.66	2	14.59	1	14.68
34	E59	44	D	1.65	39	8.78	44	7.41	38	4.68
35	C18	40	D	1.38	18	11.21	20	10.04	4	9.53
36	C101	50	D	1.29		N/A		N/A		N/A
37	C58	79	D	1.07	37	8.81	39	7.82	53	3.45
38	C17	69	C	0.93	57	7.38	74	5.58	30	5.04
39	C5	30	D	0.56	81	5.88	64	6.25	26	5.34
40	E70	63	D	0.52	34	9.14	31	8.46		N/A
41	C1	67	D	0.31	53	7.61	59	6.56		N/A
42	E32	47	C	0.29	65	7.08	67	6.10	33	4.76
43	E78	44	D	0.18	87	4.95	80	4.63	37	4.68

INVESTMENT POOLS \$10-\$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
44	E74	59	D	0.05%	75	6.15 %		N/A %		N/A %
45	C49	51	D	0.01	91	3.98	84	4.26	66	2.23
46	C94	17	D	-0.06	46	8.11	25	9.25		N/A
47	C103	49	D	-0.15	55	7.46		N/A		N/A
48	E13	35	D	-0.30	95	3.18	86	3.61	42	4.57
49	E61	64	D	-0.33	44	8.40	56	6.66		N/A
50	C100	39	D	-0.79	59	7.27	55	6.69		N/A
51	C57	46	C	-0.81	25	10.20	38	7.99	67	1.81
52	C41	66	D	-0.87	77	6.07	49	7.33	16	6.27
53	C47	45	D	-0.95	94	3.48	88	3.33	48	3.88
54	E39	52	D	-1.20	86	5.51	77	5.39	54	3.41
55	E2	62	D	-1.24	78	6.04	51	7.03	49	3.77
56	E66	55	C	-1.24	49	8.00	43	7.42		N/A
57	C16	57	C	-1.38	79	5.94	78	5.17	55	3.32
58	E85	44	C	-1.48	61	7.17	52	6.94		N/A
59	C39	45	D	-1.52	83	5.74	72	5.62	68	1.62
60	C79	57	D	-1.62	90	4.44	81	4.44	50	3.74
61	E95	50	C	-2.01	69	6.70	66	6.11	57	3.30
62	E24	62	D	-2.27	71	6.59	61	6.49	19	5.78
63	E67	65	C	-2.44	76	6.10	69	5.92	29	5.15
64	E99	53	D	-2.45	14	12.47	7	12.45		N/A
65	C71	27	D	-3.39	73	6.48	46	7.37		N/A
66	C78	42	D	-3.45	92	3.96	82	4.37	69	1.30
67	E55	63	C	-3.48	68	6.73		N/A		N/A
68	C14	58	C	-3.74	5	14.54	9	12.31		N/A
69	C45	62	D	-3.83	54	7.49		N/A		N/A
70	C76	52	D	-4.01	31	9.51	48	7.35	45	4.32
71	E14	66	D	-4.33	85	5.51	73	5.60	31	4.94
72	E10	67	D	-4.40	70	6.69	63	6.31	64	2.48
73	E81	47	D	-4.72	36	8.87	60	6.54	60	2.99
74	E71	57	C	-5.13	82	5.84	75	5.58	43	4.55
75	E79	59	D	-5.26	50	7.81	41	7.57	39	4.63
76	C28	76	C	-5.62	17	11.29	14	11.06		N/A
77	E108	59	C	-5.70	84	5.59	79	4.92	32	4.89
78	C66	59	D	-6.28	9	13.82	11	11.68		N/A
79	E4	67	D	-6.59	80	5.89	58	6.63	59	3.02
80	E86	64	D	-6.86	72	6.51		N/A		N/A
81	C98	62	D	-7.28	58	7.38	24	9.60	3	9.97
82	C84	29	C	-7.64	97	-0.02	89	1.57	63	2.51
83	C87	53	D	-7.96	33	9.21	33	8.27	65	2.43
84	C4	81	C	-8.62	62	7.13	53	6.78		N/A
85	C102	71	D	-8.68	60	7.20		N/A		N/A

INVESTMENT POOLS \$10-\$50 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN	
86	E102	72	D	-9.65%	2	17.37%	1	17.35%	6	9.23%	
87	C93	77	C	-9.82	42	8.60	32	8.34	11	7.56	
88	E3	68	D	-10.64	88	4.80	70	5.81	46	4.23	
89	E101	73	D	-10.85	52	7.73	50	7.28		N/A	
90	E52	77	D	-10.95	63	7.13	65	6.18	51	3.74	
	D-JONES			-11.70		4.88		3.45		3.70	
	SP500			-11.76		7.68		7.19		4.79	
91	E54	71	C	-11.85	13	13.01	4	13.24	22	5.66	
92	E43	72	C	-11.89	51	7.74	22	9.74	10	7.63	
	SP-IND			-12.64		7.63		7.21		4.49	
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35	
93	C63	77	C	-13.49	15	11.91	8	12.39	27	5.24	
94	E25	80	D	-13.52	11	13.25	10	12.09	20	5.78	
95	C24	80	D	-13.79	67	6.93	47	7.36		N/A	
96	E26	74	D	-14.05	35	9.12	19	10.08	35	4.71	
97	E75	74	C	-14.53	56	7.44	62	6.46	15	6.69	
98	E112	72	C	-14.72		N/A		N/A		N/A	
99	E94	73	D	-15.35	8	13.93	5	12.92		N/A	
100	E15	49	C	-15.61	74	6.28	76	5.46	56	3.31	
AVERAGE				100	-1.20%	97	8.49%	89	7.92%	69	5.18%

INVESTMENT POOLS UNDER \$10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1983

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	E7	48	F	14.64%	6	10.83%	11	8.44%	33	2.31%
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
2	C30	43	E	10.70	5	10.96	10	8.49	10	5.60
3	E87	5	F	9.79	49	2.59	47	2.74	22	4.12
4	C12	88	F	9.51	14	8.46	24	6.09		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
5	E106	29	E	8.77		N/A		N/A		N/A
6	C67	27	E	8.42	21	7.74	18	7.08	19	4.52
7	C37	24	F	7.77	39	4.58	40	4.25		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
8	E111	31	E	6.96		N/A		N/A		N/A
9	E82	38	F	6.43	20	7.79	20	6.72	9	5.66
10	E109	24	F	5.88	32	6.35	32	5.12	29	3.52
11	C10	52	F	4.98	47	2.95	38	4.58		N/A
12	E83	50	F	4.32	31	6.44	27	5.70	27	3.67
13	C92	23	E	4.30	27	7.29	17	7.16	24	3.90
14	E84	35	F	3.80	17	-8.15	14	7.85		N/A
15	E113	65	F	3.62		N/A		N/A		N/A
16	C64	20	E	3.44	33	6.33	29	5.39	12	5.40
17	C50	48	F	3.02	24	7.50	19	6.87	18	4.77
18	E88	14	F	2.68	52	-1.36	49	0.53	28	3.66
19	E23	44	F	2.59	46	3.14	42	4.09	35	2.09
20	E115	66	E	2.53		N/A		N/A		N/A
21	E64	57	E	2.30	8	10.39	5	9.80	34	2.29
22	C44	57	F	2.12	3	13.29	2	12.66	8	5.69
23	C36	41	E	1.94	38	5.51	31	5.19		N/A
24	E9	32	E	1.83	44	4.03	36	4.82		N/A
25	E41	40	E	1.77	40	4.54	43	4.07	32	2.34
26	C95	43	E	1.40	12	9.04	13	7.89	13	5.38
27	C75	56	E	1.25	26	7.33	21	6.61	20	4.46
28	E98	61	F	0.98	7	10.52	8	9.10	6	5.95
29	C73	50	F	0.70	34	6.32	30	5.33		N/A
30	C43	67	F	0.67	2	16.03	3	11.48		N/A
31	E48	52	E	0.18	23	7.68	7	9.36		N/A
32	E114	33	E	0.14	15	8.29	39	4.42	17	4.81
33	C80	60	F	-0.40	19	7.85	23	6.23	30	3.46
34	C33	48	F	-0.60	48	2.59	46	2.85		N/A
35	C91	51	F	-0.65	45	3.36	44	4.06	31	3.30
36	E104	60	F	-1.01	18	8.00		N/A		N/A
37	E44	50	F	-1.24	29	6.86	28	5.47	26	3.71
38	E103	61	E	-1.32	13	8.53		N/A		N/A
39	E42	54	E	-1.32	11	9.61	12	7.99	7	5.73
40	C23	56	E	-1.75	1	20.03	1	13.51	5	5.97

INVESTMENT POOLS UNDER \$10 MILLION
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE	EQ	SIZE	1 YEAR	#	3 YEAR	#	5 YEAR	#	10 YEAR
	NAME	%		RETURN		RETURN		RETURN		RETURN
41	E91	53	F	-2.31%	25	7.33%	22	6.52%	11	5.55%
42	C97	44	E	-2.40	22	7.69	48	1.12	23	3.91
43	C32	13	E	-2.66	35	5.82	4	11.06	1	11.06
44	E92	61	F	-3.20	36	5.73	35	5.01	3	6.51
45	C52	51	F	-3.24	37	5.54	26	5.98	14	5.07
46	C53	48	F	-3.78	28	7.02	16	7.41		N/A
47	E62	68	E	-4.08	16	8.24	15	7.67	15	5.06
48	E105	65	F	-4.63	10	10.00		N/A		N/A
49	E77	55	F	-4.91	41	4.18	34	5.01	25	3.76
50	E97	64	F	-6.29	43	4.12	33	5.06	4	6.43
51	E76	65	F	-7.37	30	6.76	25	6.08	21	4.26
52	E107	66	F	-7.37	42	4.17	37	4.76	16	4.95
53	C26	47	E	-8.81		N/A		N/A		N/A
54	E12	59	F	-8.97	4	11.59	6	9.52		N/A
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
55	C27	79	E	-13.81	51	-1.03	45	3.97		N/A
56	C40	51	E	-14.61	9	10.25	9	8.65	2	10.32
57	C51	59	F	-16.53	50	2.30	41	4.15		N/A
AVERAGE		57		0.28%	52	7.10%	49	6.41%	35	4.83%

ENDOWMENT POOLS 65% OR MORE IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C11	72	C	12.86 %	1	17.72 %		N/A %		N/A %
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
2	C81	72	C	9.75	11	11.64		N/A		N/A
3	C12	88	F	9.51	23	8.46	37	6.09		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
	SALOMON			7.43		13.85		-1.23		2.76
4	C99	72	B	7.32	9	11.71	2	14.32	1	21.63
5	E113	65	F	3.62		N/A		N/A		N/A
6	C62	70	D	2.58	48	2.29	45	3.46		N/A
7	E115	66	E	2.53		N/A		N/A		N/A
8	C58	79	D	1.07	20	8.81	23	7.82	32	3.45
9	C55	77	A	1.05	14	10.81	14	9.59	3	7.76
10	C17	69	C	0.93	35	7.38	42	5.58	19	5.04
11	C43	67	F	0.67	3	16.03	8	11.48		N/A
12	C1	67	D	0.31	31	7.61	33	6.56		N/A
13	E18	68	A	-0.51	34	7.43	30	7.13	28	4.05
14	C41	66	D	-0.87	43	6.07	28	7.33	9	6.27
15	E67	65	C	-2.44	42	6.10	39	5.92	15	5.15
16	E53	67	B	-3.78	18	9.22	16	8.62	7	6.96
17	E62	68	E	-4.08	26	8.24	24	7.67	17	5.06
18	E14	66	D	-4.33	45	5.51	41	5.60	21	4.94
19	E10	67	D	-4.40	41	6.69	35	6.31	35	2.48
20	E105	65	F	-4.63	15	10.00		N/A		N/A
21	C82	70	B	-4.91	21	8.81	18	8.39	33	3.09
22	C42	70	B	-5.50	17	9.24	22	8.11	31	3.67
23	C40	67	A	-5.57	13	10.87	17	8.42	18	5.06
24	C28	76	C	-5.62	12	11.29	9	11.06		N/A
25	E4	67	D	-6.59	44	5.89	32	6.63	34	3.02
26	E21	65	A	-7.24	24	8.33	20	8.32	29	3.95
27	E107	66	F	-7.37	47	4.17	43	4.76	20	4.95
28	E76	65	F	-7.37	40	6.76	38	6.08	24	4.26
29	E38	66	A	-7.70	27	8.18	26	7.50	10	6.15
30	E46	80	A	-7.81	32	7.48	25	7.54	27	4.20
31	E33	75	A	-7.96	25	8.25	15	8.79	25	4.25
32	C4	81	C	-8.62	38	7.13	31	6.78		N/A
33	C102	71	D	-8.68	36	7.20		N/A		N/A
34	E102	72	D	-9.65	2	17.37	1	17.35	2	9.23
35	C93	77	C	-9.82	22	8.60	19	8.34	5	7.56
36	E19	71	B	-9.91	16	9.66	11	10.46	13	5.27
37	E3	68	D	-10.64	46	4.80	40	5.81	26	4.23
38	E101	73	D	-10.85	30	7.73	29	7.28		N/A
39	E52	77	D	-10.95	37	7.13	36	6.18	30	3.74
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
40	E54	71	C	-11.85	7	13.01	3	13.24	12	5.66

ENDOWMENT POOLS 65% OR MORE IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
41	E43	72	C	-11.89%	29	7.74 %	13	9.74 %	4	7.63 %
42	C77	89	A	-12.40	28	7.78	21	8.26	6	7.46
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
43	E5	76	B	-13.28	6	13.01	6	12.37	16	5.06
44	E34	70	A	-13.35	10	11.70	10	10.50	23	4.61
45	C63	77	C	-13.49	8	11.91	5	12.39	14	5.24
46	E25	80	D	-13.52	5	13.25	7	12.09	11	5.78
47	C24	80	D	-13.79	39	6.93	27	7.36		N/A
48	C27	79	E	-13.81	49	-1.03	44	3.97		N/A
49	E26	74	D	-14.05	19	9.12	12	10.08	22	4.71
50	E75	74	C	-14.53	33	7.44	34	6.46	8	6.69
51	E112	72	C	-14.72		N/A		N/A		N/A
52	E94	73	D	-15.35	4	13.93	4	12.92		N/A
AVERAGE		52		-5.80 %	49	8.89 %	45	8.46 %	35	5.66 %

ENDOWMENT POOLS 50% TO 65% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C60	57	B	12.38%	16	11.15%	13	10.47%	7	7.50%
	COM-FDBD	0	A	10.98		0.10		2.30		N/A
	LEH-KUHN			9.04		-1.18		0.64		N/A
2	E16	57	D	8.54	2	16.89	4	12.80	6	7.55
3	E49	52	C	8.16	23	10.32	10	10.85	35	4.61
4	E68	56	C	8.02	33	9.59	31	8.48	42	4.20
	SALOMON			7.43		-3.85		-1.23		2.76
5	C65	51	C	7.16	7	13.80	9	10.96	5	8.45
6	C34	57	C	5.54	24	10.31	18	9.69	52	3.59
7	C70	55	D	5.11	29	10.04	36	8.06	11	6.19
8	C10	52	F	4.98	87	2.95	75	4.58		N/A
9	C35	51	C	4.54	5	13.95	2	13.85	2	10.65
10	E83	50	F	4.32	67	6.44	62	5.70	51	3.67
11	E60	51	D	4.27	25	10.26	44	7.48	37	4.59
12	C9	51	A	3.81	44	8.44	48	7.18	23	5.49
13	E35	59	C	3.80	46	8.36	46	7.40	59	3.12
14	E65	53	C	3.04	18	10.94	26	8.99	24	5.45
15	C20	55	B	2.79	39	8.68	37	8.05	17	5.73
16	E93	57	B	2.35	9	13.19	12	10.57		N/A
17	E64	57	E	2.30	22	10.39	17	9.80	61	2.29
18	C44	57	F	2.12	8	13.29	5	12.66	19	5.69
19	C13	61	D	1.99	3	14.66	1	14.59	1	14.68
20	C15	54	A	1.36	12	11.80	14	10.20	30	4.92
21	C101	50	D	1.29		N/A		N/A		N/A
22	C75	56	E	1.25	56	7.33	54	6.61	40	4.46
23	E27	54	B	1.10	19	10.89	28	8.54	38	4.59
24	E98	61	F	0.98	21	10.52	24	9.10	14	5.95
25	E8	54	A	0.91	13	11.74	16	9.94	22	5.50
26	C73	50	F	0.70	68	6.32	68	5.33		N/A
27	E100	59	B	0.59	61	6.87	59	6.13		N/A
28	E29	63	A	0.53	30	9.95	33	8.41	43	4.08
29	E70	63	D	0.52	38	9.14	32	8.46		N/A
30	E48	52	E	0.18	52	7.68	21	9.36		N/A
31	E74	59	D	0.05	69	6.15		N/A		N/A
32	C49	51	D	0.01	85	3.98	78	4.26	62	2.23
33	E1	55	A	-0.08	17	11.12	22	9.29	53	3.56
34	E61	64	D	-0.33	45	8.40	53	6.66		N/A
35	C80	60	F	-0.40	50	7.85	58	6.23	54	3.46
36	E90	51	A	-0.42	77	5.47	67	5.37		N/A
37	E57	55	A	-0.57	43	8.47	41	7.56	15	5.81
38	C91	51	F	-0.65	86	3.36	80	4.06	57	3.30
39	E73	50	A	-0.79	58	7.29	52	6.68	32	4.84
40	C3	57	B	-0.86	81	4.97	77	4.29	44	4.06
41	E104	60	F	-1.01	49	8.00		N/A		N/A
42	C56	59	A	-1.14	40	8.63	29	8.50	26	5.32
43	E39	52	D	-1.20	76	5.51	66	5.39	55	7.41
44	E47	60	B	-1.22	59	7.06		N/A		N/A
45	E72	58	B	-1.22	47	8.25	42	7.55	20	5.58
46	E2	62	D	-1.24	70	6.04	50	7.03	45	3.77
47	E44	50	F	-1.24	62	6.86	65	5.47	50	3.71

ENDOWMENT POOLS 50% TO 65% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
48	E66	55	C	-1.24%	48	8.00%	45	7.42%		N/A%
49	C29	57	A	-1.30	36	9.29	43	7.52	36	4.59
50	E6	51	B	-1.31	27	10.15	35	8.07	12	6.01
51	E42	54	E	-1.32	32	9.61	38	7.99	18	5.73
52	E103	61	E	-1.32	41	8.53		N/A		N/A
53	C16	57	C	-1.38	71	5.94	69	5.17	56	3.32
54	C8	57	B	-1.46	35	9.42	39	7.94		N/A
55	C79	57	D	-1.62	82	4.44	76	4.44	48	3.74
56	C23	56	E	-1.75	1	20.03	3	13.51	13	5.97
57	E95	50	C	-2.01	64	6.70	60	6.11	58	3.30
58	C68	60	A	-2.13	78	5.18		N/A		N/A
59	E24	62	D	-2.27	65	6.59	56	6.49	16	5.78
60	E91	53	F	-2.31	57	7.33	55	6.52	21	5.55
61	E99	53	D	-2.45	11	12.47	6	12.45		N/A
62	E63	59	A	-3.00	42	8.52	30	8.48	46	3.76
63	E69	64	B	-3.00	80	5.01	64	5.54	63	0.68
64	E92	61	F	-3.20	73	5.73	71	5.01	9	6.51
65	C52	51	F	-3.24	75	5.54	61	5.98	28	5.07
66	E55	63	C	-3.48	63	6.73		N/A		N/A
67	E17	60	B	-3.65	79	5.15	73	4.99	27	5.18
68	C14	58	C	-3.74	4	14.54	7	12.31		N/A
69	C45	62	D	-3.83	53	7.49		N/A		N/A
70	C76	52	D	-4.01	34	9.51	47	7.35	41	4.32
71	C2	50	B	-4.38	54	7.42	49	7.10	29	5.01
72	E36	60	A	-4.47	15	11.28	15	10.01	25	5.34
73	C31	59	B	-4.51	20	10.65	51	6.78		N/A
74	E77	55	F	-4.91	83	4.18	72	5.01	47	3.76
75	E71	57	C	-5.13	72	5.84	63	5.58	39	4.55
76	E79	59	D	-5.26	51	7.81	40	7.57	34	4.63
77	E45	56	A	-5.69	31	9.72	25	9.09	8	6.63
78	E108	59	C	-5.70	74	5.59	74	4.92	31	4.89
79	E30	62	A	-5.93	10	12.89	23	9.12	33	4.76
80	C66	59	D	-6.28	6	13.82	8	11.68		N/A
81	E97	64	F	-6.29	84	4.12	70	5.06	10	6.43
82	E86	64	D	-6.86	66	6.51		N/A		N/A
83	C98	62	D	-7.28	55	7.38	19	9.60	4	9.97
84	C87	53	D	-7.96	37	9.21	34	8.27	60	2.43
85	E56	59	B	-8.80	60	6.92	57	6.38	49	3.72
86	E12	59	F	-8.97	14	11.59	20	9.52		N/A
87	C48	60	B	-10.02	28	10.12	11	10.66		N/A
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
88	C40	51	E	-14.61	26	10.25	27	8.65	3	10.32
89	C51	59	F	-16.53	88	2.30	79	4.15		N/A
AVERAGE		89		-1.15%	88	8.67%	80	7.94%	63	5.14%

ENDOWMENT POOLS UNDER 50% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	1 YEAR RETURN	#	3 YEAR RETURN	#	5 YEAR RETURN	#	10 YEAR RETURN
1	C69	0	D	15.69%	18	9.29%	29	7.66%		N/A
2	C59	29	B	15.22	20	9.17		N/A		N/A
3	E7	48	F	14.64	10	10.83	19	8.44	48	2.31
4	C6	14	D	13.16	7	11.06	16	8.69	23	5.16
5	C7	8	A	12.90	4	11.85	13	9.10	40	3.61
6	C85	31	D	11.99	27	8.60	18	8.47	14	5.72
	COM-FDRD	0	A	10.93		0.10		2.30		N/A
7	C30	43	E	10.70	9	10.96	17	8.49	16	5.60
8	C74	12	D	10.38	15	10.06	4	11.18	3	9.27
9	E87	5	F	9.79	71	2.59	67	2.74	34	4.12
10	E58	43	D	9.60	44	7.09	47	6.03	12	6.15
	LEH-KUHN			9.04		-1.18		0.64		N/A
11	E106	29	E	8.77		N/A		N/A		N/A
12	C67	27	E	8.42	36	7.74	35	7.08	32	4.52
13	C90	14	C	7.98		N/A		N/A		N/A
14	C37	24	F	7.77	61	4.58	60	4.25		N/A
	SALOMON			7.43		-3.85		-1.23		2.76
15	E111	31	E	6.96		N/A		N/A		N/A
16	E82	38	F	6.43	35	7.79	39	6.72	15	5.66
17	E109	24	F	5.88	49	6.35	54	5.12	41	3.52
18	E80	25	C	5.57	16	9.61	8	10.14	18	5.49
19	C86	38	D	5.31	23	8.79	23	8.22	7	7.66
20	E110	39	A	5.16	34	8.02	21	8.32		N/A
21	C22	41	A	5.14	8	10.99	11	9.51	22	5.31
22	C38	33	C	5.04	26	8.61	14	9.06	5	8.04
23	C83	33	D	4.85	33	8.04	22	8.24	33	4.38
24	C89	24	D	4.70	46	7.04	42	6.63		N/A
25	C61	39	A	4.63	57	5.10		N/A		N/A
26	C88	32	D	4.43	17	9.53	24	8.14	17	5.54
27	C92	23	E	4.30	41	7.29	34	7.16	37	3.90
28	E84	35	F	3.80	30	8.15	28	7.85		N/A
29	C64	20	E	3.44	50	6.33	52	5.39	19	5.40
30	E28	17	A	3.28	58	4.99	44	6.33	35	4.06
31	E51	47	C	3.10	12	10.44	6	10.69	10	6.84
32	C50	48	F	3.02	38	7.50	37	6.87	25	4.77
33	E50	29	C	2.87	2	14.05	3	11.48	44	2.77
34	E22	38	D	2.82	66	3.53	63	3.79	28	4.70
35	E88	14	F	2.68	73	-1.36	70	0.53	39	3.66
36	E20	46	C	2.68	3	13.18	10	9.99	9	7.39
37	E23	44	F	2.59	69	3.14	61	4.09	49	2.09
38	C54	37	A	2.56	11	10.74	1	13.70	4	8.15
39	C19	49	D	2.46	63	4.53	59	4.34		N/A
40	C21	39	C	2.23	25	8.67	48	5.76	45	2.70
41	C46	33	D	2.14	32	8.05	40	6.72	27	4.72
42	C36	41	E	1.94	56	5.51	53	5.19		N/A
43	E9	32	E	1.83	64	4.03	55	4.82		N/A
44	E41	40	E	1.77	62	4.54	62	4.07	47	2.34
45	E96	49	B	1.72	19	9.24	27	7.85		N/A
46	E59	44	D	1.65	24	8.78	31	7.41	30	4.68
47	C95	43	E	1.40	21	9.04	26	7.89	20	5.38

ENDOWMENT POOLS UNDER 50% IN EQUITY
AVERAGE ANNUAL TOTAL RETURN PERFORMANCE
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE	EQ	SIZE	1 YEAR	#	3 YEAR	#	5 YEAR	#	10 YEAR
	NAME	%		RETURN		RETURN		RETURN		RETURN
48	C18	40	D	1.38%	5	11.21%	9	10.04%	2	9.53%
49	C72	48	A	1.09	40	7.45	33	7.22	6	7.90
50	C5	30	D	0.56	53	5.88	45	6.25	21	5.34
51	E32	47	C	0.29	45	7.08	46	6.10	26	4.76
52	E78	44	D	0.18	59	4.95	56	4.63	29	4.68
53	E114	33	E	0.14	29	8.29	57	4.42	24	4.81
54	C94	17	D	-0.06	31	8.11	12	9.25		N/A
55	C103	49	D	-0.15	39	7.46		N/A		N/A
56	E13	35	D	-0.30	68	3.18	64	3.61	31	4.57
57	E31	44	A	-0.47	52	5.94	49	5.70		N/A
58	C33	48	F	-0.60	70	2.59	66	2.85		N/A
59	C100	39	D	-0.79	42	7.27	41	6.69		N/A
60	C57	46	C	-0.81	13	10.20	25	7.99	50	1.81
61	C47	45	D	-0.95	67	3.48	65	3.33	38	3.88
62	E89	37	B	-1.01	1	16.19	2	11.57		N/A
63	E85	44	C	-1.48	43	7.17	36	6.94		N/A
64	C96	44	A	-1.52	60	4.71	38	6.77		N/A
65	C39	45	D	-1.52	55	5.74	50	5.62	51	1.62
66	E37	48	B	-1.72	14	10.14	15	9.01	11	6.65
67	C97	44	E	-2.40	37	7.69	69	1.12	36	3.91
68	C32	13	E	-2.66	54	5.82	5	11.06	1	11.06
69	C71	27	D	-3.39	48	6.48	32	7.37		N/A
70	C78	42	D	-3.45	65	3.96	58	4.37	52	1.30
71	C53	48	F	-3.78	47	7.02	30	7.41		N/A
72	E81	47	D	-4.72	22	8.87	43	6.54	43	2.99
73	E11	17	A	-6.00	6	11.12	7	10.16	13	5.78
74	C84	29	C	-7.64	72	-0.02	68	1.57	46	2.51
75	C26	47	E	-8.81		N/A		N/A		N/A
76	C25	12	A	-9.03	28	8.52	20	8.38	8	7.46
	D-JONES			-11.70		4.88		3.45		3.70
	SP500			-11.76		7.68		7.19		4.79
	SP-IND			-12.64		7.63		7.21		4.49
	COM-FDEQ	95	A	-13.25		11.31		12.72		5.35
77	E15	49	C	-15.61%	51	6.28%	51	5.46%	42	3.31%
AVERAGE		77		2.60	73	7.49	70	6.94	52	4.99

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %	SIZE	5 YEAR EFFIC	#	10 YEAR EFFIC	#	5 YEAR BETA	#	10 YEAR BETA
1	C99	72	B	0.77 %	1	0.87 %	171	0.14 %	150	-0.55 %
2	C13	61	D	0.50	2	0.73	54	0.63	66	0.64
3	C35	51	C	0.48	3	0.30	79	0.51	114	0.46
4	E102	72	D	0.47	9	0.10	4	1.30	3	1.29
5	C54	37	A	0.42	13	-0.04	110	0.44	95	0.54
6	E16	57	D	0.28	18	-0.10	91	0.48	84	0.57
7	C44	57	F	0.25	20	-0.11	88	0.49	36	0.76
8	E54	71	C	0.22	24	-0.13	10	1.19	4	1.24
9	E99	53	D	0.21		N/A	57	0.63		N/A
10	C23	56	E	0.21	17	-0.10	23	0.92	14	0.94
	CDM-FDEQ	0	E	0.19		-0.14		1.15		1.22
11	E94	73	D	0.19		N/A	1	1.62		N/A
12	C14	58	C	0.17		N/A	24	0.91		N/A
13	C63	77	C	0.17	28	-0.14	9	1.24	5	1.23
14	E5	76	B	0.16	27	-0.14	3	1.33	2	1.37
15	E25	80	D	0.15	23	-0.12	6	1.28	7	1.17
16	C66	50	D	0.12		N/A	15	1.01		N/A
17	E89	37	B	0.10		N/A	34	0.81		N/A
18	E50	29	C	0.10	89	-0.46	71	0.55	54	0.68
19	C43	67	F	0.10		N/A	29	0.88		N/A
20	C74	12	D	0.07	7	0.12	172	0.13	147	0.11
21	C32	13	E	0.06	4	0.28	68	0.55	110	0.48
22	C28	76	C	0.06		N/A	32	0.83		N/A
23	E34	70	A	0.05	38	-0.24	5	1.28	9	1.09
24	C48	60	B	0.03		N/A	18	0.99		N/A
25	C65	51	C	0.03	10	-0.01	121	0.38	97	0.54
26	E19	71	B	0.02	35	-0.22	17	0.99	12	0.98
27	E26	74	D	0.02	32	-0.20	7	1.25	6	1.20
28	E51	47	C	-0.01	41	-0.25	106	0.44	105	0.51
29	E93	57	B	-0.02		N/A	70	0.55		N/A
30	E11	17	A	-0.02	30	-0.20	27	0.88	13	0.95
31	E43	72	C	-0.02	12	-0.04	12	1.07	10	0.99
32	E12	59	F	-0.03		N/A	11	1.18		N/A
33	E49	52	C	-0.04	40	-0.24	182	0.06	30	0.78
34	C40	51	E	-0.04	6	0.17	2	1.43	8	1.10
35	E36	60	A	-0.05	51	-0.31	35	0.80	53	0.68
36	C15	54	A	-0.07	47	-0.27	64	0.58	26	0.81
37	E20	46	C	-0.08	21	-0.12	58	0.60	45	0.72
38	E30	62	A	-0.09	52	-0.31	19	0.97	22	0.85
39	C18	40	D	-0.11	8	0.12	74	0.53	77	0.60
40	C98	62	D	-0.11	5	0.19	49	0.66	123	0.41
41	E8	54	A	-0.11	49	-0.29	69	0.55	100	0.53
42	E45	56	A	-0.13	26	-0.14	30	0.85	19	0.90
43	E64	57	E	-0.14	65	-0.39	92	0.48	21	0.86
44	C77	89	A	-0.15	14	-0.06	15	1.02	11	0.99
45	E33	75	A	-0.16	74	-0.41	33	0.82	31	0.78
46	C25	12	A	-0.17	16	-0.09	21	0.94	23	0.83
47	C93	77	C	-0.17	15	-0.06	20	0.95	15	0.92
48	C55	77	A	-0.18	22	-0.12	85	0.50	82	0.58

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFIC	#	10 YEAR EFFIC	#	5 YEAR BETA	#	10 YEAR BETA
49	E37	48	B	-0.18%	36	-0.23%	46	0.68%	69	0.63%
50	E40	67	A	-0.19	48	-0.28	31	0.84	18	0.90
51	C87	53	D	-0.20	102	-0.51	28	0.88	17	0.91
52	E75	74	C	-0.21	11	-0.02	8	1.24	1	1.38
53	E1	55	A	-0.21	84	-0.45	72	0.55	35	0.76
54	C24	80	D	-0.22		N/A	14	1.02		N/A
	SP-IND			-0.24		-0.31		1.04		1.01
55	E21	65	A	-0.25	91	-0.47	41	0.73	38	0.75
	SP500			-0.25		-0.29		1.00		1.00
56	E80	25	C	-0.25	57	-0.34	162	0.20	99	0.53
57	C82	70	B	-0.26	80	-0.43	44	0.70	16	0.91
58	E53	67	B	-0.26	29	-0.16	53	0.63	34	0.77
59	E48	52	E	-0.27		N/A	155	0.24		N/A
60	E98	61	F	-0.27	61	-0.36	87	0.49	86	0.57
61	E101	73	D	-0.28		N/A	25	0.89		N/A
62	C42	70	B	-0.28	95	-0.48	43	0.72	28	0.79
63	E27	54	B	-0.28	71	-0.40	65	0.57	39	0.74
64	E68	56	C	-0.29	83	-0.44	177	0.09	116	0.46
65	C60	57	B	-0.29	31	-0.20	186	-0.01	136	0.31
66	C22	41	A	-0.30	73	-0.41	136	0.33	91	0.56
67	E38	66	A	-0.31	34	-0.22	37	0.79	24	0.82
68	C76	52	D	-0.31	77	-0.43	47	0.68	47	0.71
69	E63	59	A	-0.31	100	-0.50	63	0.59	49	0.71
70	E46	80	A	-0.31	75	-0.43	38	0.79	25	0.82
71	E6	51	B	-0.31	43	-0.26	56	0.63	41	0.73
72	C94	17	D	-0.32		N/A	139	0.31		N/A
73	E15	49	C	-0.33	72	-0.41	13	1.05	32	0.78
74	C56	59	A	-0.34	60	-0.36	80	0.51	63	0.65
75	E65	53	C	-0.35	55	-0.33	124	0.38	80	0.59
76	E29	63	A	-0.36	66	-0.39	78	0.52	44	0.72
77	E52	77	D	-0.36	70	-0.39	22	0.94	20	0.89
78	C4	81	C	-0.37		N/A	36	0.79		N/A
79	C31	59	B	-0.37		N/A	50	0.66		N/A
80	E42	54	E	-0.37	44	-0.27	96	0.47	67	0.64
81	C34	57	C	-0.37	119	-0.60	151	0.26	106	0.50
82	E62	68	E	-0.37	78	-0.43	55	0.63	78	0.60
83	C8	57	B	-0.38		N/A	66	0.56		N/A
84	E79	59	D	-0.39	85	-0.45	52	0.65	46	0.71
85	C57	46	C	-0.39	124	-0.63	105	0.44	55	0.68
86	E7	48	F	-0.41	120	-0.60	187	-0.03	120	0.43
87	E70	63	D	-0.41		N/A	99	0.46		N/A
88	C29	57	A	-0.42	94	-0.48	67	0.56	75	0.61
89	E4	67	D	-0.43	108	-0.54	48	0.67	33	0.77
90	C27	79	E	-0.43		N/A	101	0.45		N/A
91	E81	47	D	-0.44	106	-0.53	42	0.72	29	0.79
92	E56	59	B	-0.44	110	-0.54	39	0.77	42	0.73
93	C58	79	D	-0.49	115	-0.58	98	0.46	62	0.65
94	C7	8	A	-0.50	105	-0.53	185	-0.01	144	0.21
95	E57	55	A	-0.50	53	-0.32	90	0.49	58	0.66
96	C2	50	B	-0.50	69	-0.39	62	0.59	48	0.71

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFIC	#	10 YEAR EFFIC	#	5 YEAR BETA	#	10 YEAR BETA
97	C96	44	A	-0.50%		N/A	113	0.42%		N/A %
98	E3	68	D	-0.51	101	-0.50	40	0.74	52	0.69
99	E72	58	B	-0.52	56	-0.34	83	0.51	56	0.67
100	C53	48	F	-0.52		N/A	94	0.47		N/A
101	E76	65	F	-0.53	116	-0.58	45	0.69	73	0.61
102	E66	55	C	-0.53		N/A	84	0.51		N/A
103	C100	39	D	-0.54		N/A	107	0.44		N/A
104	E96	49	B	-0.54		N/A	112	0.42		N/A
105	C51	59	F	-0.54		N/A	26	0.88		N/A
106	C38	33	C	-0.55	25	-0.13	175	0.11	135	0.31
107	C30	43	E	-0.56	46	-0.27	173	0.12	89	0.56
108	C20	55	B	-0.56	62	-0.37	130	0.36	85	0.57
109	C69	0	D	-0.56		N/A	194	-0.24		N/A
110	C95	43	E	-0.57	58	-0.35	115	0.41	68	0.64
111	E10	67	D	-0.57	121	-0.61	60	0.60	37	0.76
112	C6	14	D	-0.58	103	-0.51	184	0.00	133	0.32
113	C71	27	D	-0.58		N/A	128	0.37		N/A
114	E24	62	D	-0.60	45	-0.27	89	0.49	60	0.65
	D-JONES			-0.61		-0.47		0.90		0.84
115	C85	31	D	-0.61	39	-0.24	193	-0.19	111	0.47
116	E114	33	E	-0.61	87	-0.45	75	0.53	146	0.17
117	E18	68	A	-0.62	112	-0.55	102	0.45	71	0.62
118	E61	64	D	-0.63		N/A	108	0.44		N/A
119	C70	55	D	-0.63	90	-0.47	149	0.27	132	0.35
120	E91	53	F	-0.63	67	-0.39	73	0.53	94	0.54
121	E85	44	C	-0.66		N/A	95	0.47		N/A
122	E2	62	D	-0.67	107	-0.54	114	0.42	61	0.65
123	E60	51	D	-0.67	68	-0.39	138	0.32	59	0.65
124	E59	44	D	-0.68	86	-0.45	129	0.36	102	0.52
125	E71	57	C	-0.69	88	-0.45	59	0.60	51	0.69
126	E107	66	F	-0.69	54	-0.33	51	0.65	27	0.80
127	E73	50	A	-0.70	99	-0.49	109	0.44	88	0.56
128	C80	60	F	-0.70	118	-0.59	116	0.41	76	0.60
129	E44	50	F	-0.71	98	-0.49	76	0.53	50	0.70
130	C72	48	A	-0.72	19	-0.11	123	0.38	109	0.48
131	E110	39	A	-0.72		N/A	160	0.21		N/A
132	C88	32	D	-0.73	76	-0.43	146	0.28	107	0.49
133	E84	35	F	-0.74		N/A	144	0.28		N/A
134	C41	66	D	-0.78	33	-0.22	142	0.29	65	0.65
135	E108	59	C	-0.80	81	-0.44	61	0.59	74	0.61
136	C52	51	F	-0.81	97	-0.49	97	0.46	83	0.58
137	E14	66	D	-0.82	63	-0.37	82	0.51	43	0.73
138	E100	59	B	-0.82		N/A	117	0.40		N/A
139	C21	39	C	-0.85	135	-0.72	119	0.39	79	0.60
140	E95	50	C	-0.85	138	-0.76	100	0.45	104	0.52
141	E97	64	F	-0.86	37	-0.24	77	0.52	72	0.61
142	E77	55	F	-0.89	133	-0.69	86	0.49	103	0.52
143	E92	61	F	-0.89	42	-0.25	93	0.48	87	0.56
144	E69	64	B	-0.89	143	-0.83	111	0.43	81	0.58
145	E67	65	C	-0.89	64	-0.39	103	0.45	57	0.66

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE	EQ	SIZE	5 YEAR	#	10 YEAR	#	5 YEAR	#	10 YEAR
	NAME	%*		EFFIC		EFFIC	#	BETA		BETA
146	C1	67	D	-0.90 %		N/A %	122	0.38 %		N/A %
147	E9	32	E	-0.91		N/A	148	0.27		N/A
148	C97	44	E	-0.92	96	-0.48	81	0.51	141	0.25
149	E28	17	A	-0.96	136	-0.72	165	0.18	131	0.37
150	C9	51	A	-0.97	109	-0.54	147	0.28	118	0.45
151	C75	56	E	-0.98	59	-0.36	135	0.34	40	0.74
152	E31	44	A	-1.00		N/A	126	0.37		N/A
153	E17	60	B	-1.00	92	-0.47	104	0.45	92	0.55
154	C50	48	F	-1.01	126	-0.64	143	0.29	115	0.46
155	C46	33	D	-1.01	141	-0.81	145	0.28	138	0.30
156	E35	59	C	-1.08	145	-0.87	159	0.22	122	0.42
157	C67	27	E	-1.09	93	-0.48	183	0.05	121	0.43
158	C17	69	C	-1.11	111	-0.55	131	0.35	112	0.47
159	C12	88	F	-1.13		N/A	181	0.07		N/A
160	C86	38	D	-1.13	50	-0.29	164	0.19	140	0.27
	COM-FDBD	0	D	-1.14		N/A		-0.43		N/A
161	C16	57	C	-1.15	122	-0.61	118	0.39	70	0.63
162	C39	45	D	-1.16	131	-0.68	127	0.37	64	0.65
163	C73	50	F	-1.18		N/A	137	0.32		N/A
164	C89	24	D	-1.18		N/A	167	0.16		N/A
165	E32	47	C	-1.19	79	-0.43	141	0.29	93	0.55
166	E39	52	D	-1.25	129	-0.68	133	0.35	90	0.56
167	E90	51	A	-1.26		N/A	134	0.34		N/A
168	C78	42	D	-1.31	150	-1.13	120	0.39	113	0.47
169	C83	33	D	-1.34	137	-0.74	168	0.15	130	0.38
170	C3	57	B	-1.39	123	-0.63	132	0.35	96	0.54
171	E23	44	F	-1.43	146	-0.89	169	0.15	124	0.41
172	C92	23	E	-1.49	132	-0.69	174	0.12	126	0.38
	SALOMON			-1.50		-0.63		-0.43		-0.04
173	C5	30	D	-1.52	149	-1.09	157	0.23	142	0.24
	LEH-KUHN			-1.53		N/A		-0.39		N/A
174	C36	41	E	-1.56		N/A	156	0.23		N/A
175	E58	43	D	-1.61	82	-0.44	189	-0.05	145	0.20
176	C79	57	D	-1.65	139	-0.76	140	0.31	117	0.45
177	C84	29	C	-1.67	144	-0.83	125	0.37	108	0.49
178	C37	24	F	-1.70		N/A	191	-0.06		N/A
179	E78	44	D	-1.71	117	-0.59	152	0.25	119	0.44
180	E87	5	F	-1.85	104	-0.52	195	-0.27	149	0.04
181	E13	35	D	-1.96	134	-0.70	154	0.24	128	0.38
182	E109	24	F	-2.03	127	-0.65	179	0.09	127	0.38
183	C33	48	F	-2.03		N/A	153	0.24		N/A
184	E41	40	E	-2.08	148	-0.99	163	0.20	134	0.31
185	C62	70	D	-2.15		N/A	188	-0.04		N/A
186	C47	45	D	-2.15	114	-0.58	150	0.26	98	0.53
187	C49	51	D	-2.19	147	-0.97	158	0.22	125	0.40
188	C10	52	F	-2.33		N/A	190	-0.06		N/A
189	C64	20	E	-2.35	113	-0.56	166	0.17	129	0.38
190	C91	51	F	-2.38	128	-0.66	161	0.21	101	0.52

ALL INVESTMENT POOLS
RANKING BY EFFICIENCY AND BETA
FOR THE PERIOD ENDING JUNE 30, 1982

#	CODE NAME	EQ %*	SIZE	5 YEAR EFFIC	#	10 YEAR EFFIC	#	5 YEAR BETA	#	10 YEAR BETA
191	E82	38	F	-2.57%	130	-0.68 %	180	0.08 %	143	0.23%
192	C19	49	D	-2.70		N/A	170	0.15		N/A
193	E88	14	F	-2.99	140	-0.76	192	-0.17	148	0.06
194	E83	50	F	-3.11	142	-0.82	176	0.11	139	0.30
195	E22	38	D	-3.34	125	-0.63	178	0.09	137	0.30
AVERAGE		0		-0.64%	0	-0.39 %	0	0.50 %	0	0.61%

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EXHIBIT IV

INSTITUTIONS WHICH APPLY A SPENDING FORMULA FOR BUDGETING PURPOSES

<u>Institution</u>	<u>1981-82 Spending Rate Formula</u>	<u>Spending Rate Formula Change from Prior Year</u>
The Academy of the New Church	7% increase in income over the previous year. If not earned, taken from appreciation.	No Change
Alfred University	6% of 3-year moving average of market value.	No Change
Alma College	Increase by 5%	Spent yield in 1981
Boston University	5% based on a 5-year moving average.	No Change
Brown University	4½-5½% of prior year average quarterly market value.	No Change
Bryn Mawr College	Designated amount increased by a specific growth rate.	No Change
Bucknell University	5% of 3-year moving average.	No Change
California Institute	5 3/4% of market value of the pooled endowment portfolio averaged over a prior 3-year period.	No Change
Carleton College	6% of the 5-year average market value of endowment assets computed quarterly set back one year.	No Change
Case Western Reserve	6.3% of 7/1/79 market value adjusted for additions.	6% used in 1981
Claremont McKenna College	6% of 2½-year adjusted average market value.	No Change
Clark University	5% of a 20-quarter moving average.	No Change
Colby College	5% of 5-year moving average adjusted for gifts.	Spent yield in 1981
Colgate University	Endowment income increased at 3% annually until it falls to 5½% of market, then increased at 6%.	No Change
College of William and Mary	5½% of preceeding calendar year-end market value.	No Change

<u>Institution</u>	<u>1981-82 Spending Rate Formula</u>	<u>Spending Rate Formula Change from Prior Year</u>
College of Wooster	7% of 12-quarter average market value of total return portfolios.	No Change
Columbia University-Teachers College	10% Spending	7% Spending in 1981
Cooper Union	Assumption of a longer term combined total return of 9% and use of 5% for operations.	No Change
Cornell College	6% of June 30 market value	No Change
Cornell University	7% above prior year spending	Spent yield in 1981
Dartmouth College	Greater of, (1) 5% of market or (2) lesser of 80% of yield or 5½% of market.	Spend a specific dollar amount increased by trustee vote over prior year.
Davidson College	5% of prior 3-year average market value.	No Change
Doane College	5% of the average market value on June 30 of the last 3 years.	No Change
Drew University	5% of the average market value of preceeding 3 years.	No Change
Duke University	Spend 4% of prior 12 quarter average.	4% of the market objective
Earlham College	5% of 12 quarter moving average set back two quarters.	No Change
Eastern Michigan Univ.	10% of the previous fiscal year-end market value.	No Change
Furman University	5% of market value.	No Change
Georgetown University	4½% of market value.	No Change
Grinnell College	22% of operational budget	Spent yield in 1981
Haverford College	5% of four quarter average market value.	5% of 5-year average in 1981.
Hope College	8% of year-end market.	Spent yield in 1981
Indiana University	5% of last 8 quarter's moving average.	No Change

<u>Institution</u>	<u>1981-82 Spending Rate Formula</u>	<u>Spending Rate Formula Change from Prior Year</u>
Kenyon College	5% of market value calculated at beginning of fiscal year.	No Change
Lafayette College	5% of unrestricted endowment.	No Change
Lehigh University	Base amount increased 5% annually, adjusted for additions.	Spent yield in 1981
Marquette University	Withdraw an amount equal to 5% of a 3-year moving average of the total market value at June 30 for the latest three fiscal years, plus current year additions on a time-weighted basis.	No Change
Oberlin College	Increase 8% annually, as long as not above 5.5% of preceding calendar year average market value.	No Change
Occidental College	5% of 3 year moving average.	No Change
Ohio Northern University	6% of beginning year market value.	No Change
Ohio Wesleyan University	Spend yield of 5%	No Change
Oregon State Board of Higher Education	7% of a 5-year moving average.	No Change
Otterbein College	5% of a 3-year moving average.	No Change
Pomona College	5.5% of 12 quarter average market value.	No Change
Princeton University	6% increase in net income.	No Change
Reed College	5% of 13-quarter average moving unit value.	No Change
Rensselaer Polytechnic Institute	8% total return formula	Income stabilization plan.
Rhode Island School of Design	5% of moving 3-year market value lagged 6 months.	One year lag in 1981.
Rockhurst College	8% of market value	N/A
Saint Mary's College	5% of previous 3 calendar year-end market values.	No Change

<u>Institution</u>	<u>1981-82 Spending Rate Formula</u>	<u>Spending Rate Formula Change from Prior Years</u>
Simmons College	5% of moving 3-year market value lagged 1 year.	No Change
Smith College	6% of the average market value of 12 quarters ending March 31, preceding the start of the next June 30 fiscal year.	No Change
Southwestern at Memphis	6% of beginning year market value.	No Change
Spelman College	5½% of the average value of four prior quarters, but not less than prior year spending.	No Change
Stanford University	Target rate of 4.75%, but spending above or below this rate permitted. Currently, income is being reinvested.	No Change
State University of New York	5½% of market value.	No Change
University of Chicago	5% of moving average market values of six of the last ten years (adj. for gifts) ending prior to the start of the fiscal year with two highest and the two lowest years excluded from the average.	No Change
University of Maryland	Lesser of dividends and interest received or 5% of 5 year rolling market value.	No Change
University of Miami	5% of prior 3 year average market value.	No Change
University of Missouri	5% of average quarterly market value.	No Change
University of North Carolina	Spending adjusted by institutional inflation index up to a maximum.	No Change
University of Notre Dame	Based on prior years earnings per unit trend.	No Change
University of Pennsylvania	6.6% of 3 year moving average set back 1 year.	Spent yield in 1981
University of Richmond	5% of 3 year moving average market value.	No Change

<u>Institution</u>	<u>1981-82 Spending Rate Formula</u>	<u>Spending Rate Formula Change from Prior Years</u>
University of Tennessee (Chattanooga)	85% of net income	No Change
University of Virginia	4% increase in income.	No Change
Vanderbilt University	5.5% of 5-year average market value adjusted for additions.	No Change
Wellesley College	Spend a specific amount.	No Change
Wells College	Spend a fixed amount.	No Change
Wentworth Institute of Technology	80% of estimated income	No Change
Wesleyan University	Board approves a dollar reliance figure for support of operations and capital expenditures.	No Change
Wheaton College	5% of beginning market value.	No Change
Worcester Polytechnic Institute	6% of prior two years average market value.	No Change
Yale University	4.5% of five-year moving average.	No Change

EXHIBIT VINDEX OF INVESTMENT MANAGERS (1)

<u>Institution</u>	<u>Investment Managers</u>
Academy of the New Church	Pitcairn Incorporated (S,B)
Agnes Scott College	Trust Company of Georgia (S,B)
Alfred University	BEA Associates, Inc. (S,B) Reich & Tang, Inc. (S)
Allegheny College	Standish, Ayer & Wood, Inc. (S,B)
Alma College	Mitchell Hutchins, Inc. (S) Paine Webber (S,B)
American University of Beirut	Fiduciary Trust (S,B)
Amherst College	Miller, Anderson & Sherrerd (S,B) Grantham, Mayo, Van Otterloo & Co., Inc. (S,B) Morgan Stanley Asset Management Co. (B)
Arizona State University	Northern Trust Company of Arizona (S,B)
Auburn University	Investment Counsel Company (S,B) Scudder Stephens & Clark (S,B)
Babson College	Babson Reports (S,B)
Baldwin-Wallace College	Internally Managed
Bates College	Internally Managed
Baylor College of Medicine	Baptist Foundation of Texas (S,B) Fayez Sarofim & Company (S,B) Internally Managed
Baylor University	Baptist Foundation of Texas (S,B)
Berea College	Century Capital Associates (S) Delaware Investment Advisers (S) Harris Bank of Chicago (B) J.W. Seligman & Company (S)
Berry College	Trust Company of Georgia (S,B)
Birmingham-Southern College	First National Bank of Birmingham (S,B) Central Bank of Birmingham (S,B) Birmingham Trust National Bank (S,B)
Boston University (2)	Endowment Management & Research (S,B) Frontier Capital Management Co. (S) Essex Investment Management Co. (S)

InstitutionInvestment Managers

Brandeis University

Rothschild Capital Management (S)
 Brundage, Story & Rose (S)
 Essex Investment Management (S,B)
 Boston Company (B)

Brown University

Endowment Management & Research (S)
 Essex Investment Management (S)
 Scudder, Stevens & Clark (B)
 Brundage, Story & Rose (S)
 Campbell Advisors (S)

Bryant College of Business Admin.

Martin Sosnoff (S,B)
 Colonial Consulting (S,B)

Bryn Mawr College

J & W Seligman (S,B)
 Lombard Odier (S,B)

Bucknell University

Internally Managed

California Institute of Technology

Endowment Management & Research (S,B)
 Fayed Sarofim (S,B)
 IDS Advisory (S,B)
 Endowment Management & Research (S,B)

Canisius College

Windsor Fund (S)

Carleton College

Northwestern National Bank of
 Minneapolis (S,B)
 Alliance Capital Management (S,B)
 The St. Paul Companies (B)
 Essex Investment Management Co. (S,B)

Carnegie-Mellon University

Guild Investment Management (S,B)
 BEA Associates (S,B)
 Capital Guardian Trust Co. (S)
 Delaware Investment Advisers, Inc. (S)
 T. Rowe Price Associates (S)
 Equity Research Associates (S)

Case Western Reserve University

Luther King Capital Management (S)
 Central National Bank-Cleveland (S,B)
 Ameritrust (S,B)
 William D. Witter (S)
 National City Bank of Cleveland (S,B)
 State Street Research & Management (B)

Chapman College

Internally Managed

Claremont McKenna College

Mutual Fund Management (S,B)
 Everett Harris & Company (S,B)
 Cramblit & Carney (S,B)

Clark University

Thorndike, Doran, Paine & Lewis (S,B)
 Essex Management (S,B)

InstitutionInvestment Managers

Clarkson College of Technology

Brundage, Story & Rose (S,B)
William D. Witter (S,B)

Colby College

T. Rowe Price Associates (S,B)
J & W Seligman (S)

Colgate University

Miller, Anderson & Sherrerd (S)
Shufro, Rose & Ehrman (S)
American Fletcher National Bank (B)
Bessemer Trust Company First
National Bank Palm Beach (S,B)

College of William & Mary

Capitoline Investment Services (S,B)
Fort Hill Investors Management Corp.
(S,B)

College of Wooster

Woodbyne Corporation (S)
Carnegie Capital Advisors (S)
Fiduciary Trust Company (B)
David J. Greene & Company (S)

Colorado College

John W. Bristol & Company, Inc. (S,B)

Columbia University

Garrison Keough (S)
Internally ManagedColumbia University-Teachers
CollegeFiduciary Trust Company (S,B)
Morgan Stanley Asset Management (S,B)
Connecticut Bank & Trust (S,B)
Glickenhous & Company (S,B)

Connecticut College

Hartford National Bank (S,B)

Cooper Union

Miller, Anderson & Sherrerd (S,B)
Cooke & Bieler (S,B)
United States Trust (S,B)

Cornell College

Fayez Sarofim & Company (S,B)

Cornell University

Internally Managed

Dartmouth College

State Street Research & Management (B)
Delaware Investment Advisers (S)
Pioneering Management Corp. (S)
T. Rowe Price Associates (S)

Davidson College

Wentworth, Hauser & Violich (B)
Fayez Sarofim & Company (S,B)
Lexington Management Company (S,B)

Denison University

MacKay Shields Financial Corp. (S,B)
National City Bank (S,B)

Dickinson College

American Bank & Trust Company (S,B)

<u>Institution</u>	<u>Investment Managers</u>
Doane College	Hartford National Bank (S,B) National Bank of Commerce (S,B) First National Bank (S,B)
Drake University	Harris Trust & Savings Bank-Chicago (S,B) Iowa Des Moines National Bank (B)
Drew University	Smith Barney Harris Upham & Co. (S,B) J & W Seligman (S,B)
Duke University	T. Rowe Price (S,B) Paine Webber Mitchell Hutchins (S,B)
Earlham College	Delaware Investment Advisers (S) Putnam Capital Companies (S,B) Stein Roe & Farnham (S,B)
Eastern Michigan University	Janny Montgomery Scott Inc. (S,B)
Endowment Association of College of William & Mary	Fort Hill Investors Management (S,B) Capitoline Investment (S,B)
Franklin & Marshall College	Mercantile Safe Deposit & Trust (B) Ruane Cuniff & Company Inc. (S)
Furman University	Thorndike, Doran, Paine & Lewis (S) Trevor, Stewart, Burton & Jacobsen, Inc. (S)
George Washington University	David L. Babson & Company (S,B)
Georgetown University (2)	Warburg Pincus Counselors (S,B) Fayez Sarofim & Company (S,B) Riggs National Bank (S,B) Weiss, Peck & Greer (S,B)
Grinnell College	Ruane, Cuniff & Company Inc. (S,B) Pacific Financial Research (S,B)
Hamilton College	Internally Managed
Hampton Institute	Smith Barney Harris Upham & Co. (S,B)
Harvard University	Internally Managed Scudder Stevens & Clark (B) Eberstadt Asset Management (S) York Management (S)
Haverford College	United States Trust (S,B) J. W. Bristol (S)
Hendrix College	Scudder Stevens & Clark (S,B)
Hope College	Burnham Walling & Company (S,B) First Michigan Bank & Trust (B)

<u>Institution</u>	<u>Investment Managers</u>
Howard University	John W. Bristol & Co., Inc. (S,B) Investment Advisors Inc. (S,B)
Indiana University	Indiana National Bank (S,B) American Fletcher National Bank (S,B) Merchants National Bank (S,B) State of Indiana (S,B)
John Hopkins University	Miller, Anderson & Sherrerd (S,B) Weiss Peck & Greer (S) Allen & Co. (S)
Kalamazoo College	Delaware Investment Advisers (S,B) Putnam Administrative Services Co. (S) The Fletcher Group (S)
Kenyon College (2)	Bernstein McCaulay (S,B)
Knox College (2)	Hotchkiss & Peckenpaugh Inc. (S)
Lafayette College	Thorndike, Doran, Paine & Lewis (S,B) Capital Guardian Trust Co. (S,B)
Lawrence University	Endowment Management & Research Corp. (S,B) Windsor Securities (S) First National Bank of Appleton (S,B)
Lehigh University	First Manhattan Company (S) General American Investors (S) Capital Guardian Trust Co. (S)
Loyola University of Chicago	Internally Managed
McGill University	Royal Trust Company (S,B) Beutal Goodman (S,B) Bolton Tremblay (S,B)
Marquette University	Heritage Investment Advisors, Inc. (S,B) Marshall & Ilsley Bank (S,B)
Massachusetts Institute of Tech.	Thorndike, Doran, Paine & Lewis, Inc. (S,B)
Medical College of Pennsylvania	Cooke & Bieler (S,B)
Mercer University	Internally Managed
Michigan State University	Scudder, Stevens & Clark (S,B) Detroit Bank & Trust Company (S,B)
Middlebury College	Beck, Mack & Oliver (S,B) Campbell Advisors Inc. (S,B)

<u>Institution</u>	<u>Investment Managers</u>
Monmouth College	New Court Management Inc. (S,B)
Moravian College	First Valley Bank (S,B) McGlinn Investments Inc. (S,B)
Mt. Holyoke College	Scudder, Stevens & Clark (S,B)
Muhlenberg College	Scudder, Stevens & Clark (S,B) McGlinn & Associates (S,B)
Newberry College	South Carolina National Trust (S,B)
New York University	Harris Bank & Trust (B) Thorndike, Doran, Paine & Lewis (B) U.S. Trust Company (B) Warburg, Pincus, Counselors (S) Hellman Jordan Management Co. (S) Fischer, Francis, Tree & Watts (B)
North Carolina State University (2)	Wachovia Bank & Trust Company (S,B)
Northwestern University	Internally Managed
Norwich University	Morgan Guaranty Trust Company (S,B)
Oberlin College	Capital Guardian Trust Company (S) Wertheim Asset Management Services (S,B) First National Bank of Atlanta (B) National City Bank of Cleveland (S,B)
Occidental College (2)	Morgan Guaranty (S,B) Scudder, Stevens & Clark (S,B) Decatur Income Fund (S) Investment Company of America (S) Putnam Investors Fund (S)
Ocean County College	Butcher and Singer (S,B)
Ohio Northern University	BancOhio Trust Department (S,B)
Ohio State University	Neuberger Corp. Mutual Fund (S) Huntington Investment Company (B) Siebel Capital Management (S) Chicago Corp. (S)
Ohio University	Andrecom Advisors, Inc. (S,B) Brundage, Story & Rose (S,B) Tallasi Management Co. (S)
Ohio Wesleyan University	Technological Investors Management (S) Morgan Guaranty Trust (S,B) Ivy Fund (S,B)
Oregon State Board of Higher Educ.	Dodge & Cox (S,B)

InstitutionInvestment Managers

Otterbein College

BancOhio Trust Department (S,B)
Robinson Humphrey (S)

Pennsylvania State University

Mellon Bank (S,B)

Philadelphia College of Pharmacy
and Science

MH/Edie Investment Counsel (S,B)

Philadelphia College of Textiles
and ScienceGirard Bank (S,B)
Philadelphia National Bank (S,B)

Pomona College

Grantham Mayo (S)
Loomis-Sayles (S,B)
Scudder, Stevens & Clark (S,B)
General American (S)

Pratt Institute

U.S. Trust Company (B)
Neuberger & Berman (S,B)
William Witter Company (S,B)

Princeton University

John Bristol & Company (S)
Vilas-Fisher Associates LTD (S)
Capital Guardian Trust Company (S)
Atlantic Capital Management (S)
Scudder, Stevens & Clark (B)
Essex Investment Management Co. (S)

Radcliffe College

Rosenberg Capital Management (B)
Beck, Mack & Oliver (S)
General American Investors (S)
Fiduciary Trust Company (S,B)

Reed College

Schroeder Capital Management (S,B)

Rensselaer Polytechnic Institute

Miller, Anderson & Sherrerd (S)
Brundage, Story & Rose (S,B)
Campbell Advisors (S)

Rhode Island School of Design

Endowment Management & Research, Inc.
(S,B)
Essex Investment Management Co. (S,B)
Beck, Mack & Oliver (S,B)

Rice University

Fayez-Sarofim & Company (S,B)

Rochester Institute of Technology

T. Rowe Price Associates (B)
Delaware Investment Advisers (S,B)
Pioneering Management Corp. (S)
Investors Research Corp. (S)
Kemper Financial Services (S)
Putnam Management Capital Co. (S)

InstitutionInvestment Managers

Rockefeller University

Rockefeller & Company (S,B)

Rockhurst College

Internally Managed

Rollins College

Scudder, Stevens & Clark (S,B)
 Barnett Bank of Winter Park (S,B)
 Trust Company of Florida (S,B)
 ComBank of Winter Park (S,B)

Russell Sage College

State Bank of Albana (S,B)
 Marine Midland Bank (S,B)

Rutgers, The State University

Chemical Bank of New York (S,B)

St. Louis University

Kemper Financial Services (S)
 Pioneering Management Corp. (S)
 Centerre Trust Company (S)
 Boatmen's National Bank of St. Louis (B)
 Mercantile Trust Company (B)
 Neuberger & Berman Management (S)
 Friess Associates Inc. (S)
 Dimensional Fund Advisors Inc. (S)

St. Mary's College

National Bank & Trust (B)
 Brundage, Story & Ross (S)
 Harris Bank (B)
 First Bank & Trust (S)
 St. Joseph Bank (E)

St. Norbert College

(Externally Managed -- Endowment
 Held Under Trust Agreements)

Simmons College

Harbor Capital Management Company (S,B)

Skidmore College (2)

Tallasi Management Co. (S)
 Value Line Asset Management (S)
 Lincoln 1st Bank-Trust (S,B)

Smith College

Morgan Guaranty Trust Co. of N.Y. (S)
 Capital Guardian Trust Company (S)
 Beck, Mack & Oliver (S)
 Kidder Peabody & Company (S)

Southern Methodist University (2)

Fayez Sarofim & Company (S,B)

Southwestern at Memphis

National Bank of Commerce (B)
 Union Planters (S,B)
 1st Tennessee Bank (S,B)
 Vaughn Nelson Hargrove (S,B)
 1st National Bank-Mobile (S,B)

Southwestern University

Fayez Sarofim & Company (S,B)

InstitutionInvestment Managers

Spelman College

William D. Witter Inc. (S,B)
Weiss, Peck & Greer--New York (S,B)

Stanford University

Capital Guardian Trust Company (S)
G.T. Management (S)
Rosenberg Capital Management (B)
Grantham, Mayo, Van Otterloo (S)

State University of New York

Manufacturers & Traders Trust Co. (S,B)
Marine Midland Bank (S,B)

Sweet Briar College

Capitoline Investment Services (S,B)

Syracuse University

Internally Managed

Temple University

Cole, Yeager & Wood (S)
T. Rowe Price Associates (S)

Thomas Jefferson University

Stratton Management Co. (S,B)

Trinity College (Conn.)

Hartford National Bank & Trust Co. (S,B)

Trinity College (Wash, D.C.)

American Security Bank (S,B)

Tulane University

Internally

University of Akron

First National Bank of Akron (S,B)
BancOhio (S,B)
Oppenheimer Capital Corp. (S,B)
National City Bank of Akron (B)

University of Alabama System

Invesco Capital Management Inc. (S,B)
Thorndike, Doran, Paine & Lewis (S,B)

University of Arizona

Internally Managed

University of Arkansas

Stephens Inc. (S,B)
Internally Managed

University of Chicago

Internally Managed

University of Cincinnati

Scudder, Stevens & Clark (S)
Delaware Investment Advisers (S)
Johnson Investments (B,S)
Fifth Third Bank (S,B)

University of Connecticut

Internally Managed

University of Dayton

Boston Company Financial Strategies,
Inc. (S,B)

University of Delaware

Internally Managed
Bank of Delaware (S)

InstitutionInvestment Managers

University of Denver

Internally Managed
 United Bank of Denver
 First National Bank of Denver (S,B)
 Colorado National Bank (S,B)
 Central Bank & Trust (S,B)
 IntraWest Bank of Denver (S,B)
 Mountain States Bank (B)

University of Evansville

Internally Managed

University of Houston System (2)

Fayez Sarofim & Company (S,B)

University of Iowa Foundation

First National Bank of Iowa City (S,B)
 Putnam Capital Management (S,B)

University of Maine

Loomis, Sayles & Company (S,B)

University of Maryland

Thorndike, Doran, Paine & Lewis (S,B)

University of Massachusetts

Internally Managed

University of Miami

Invesco Capital Management (S,B)
 Southeast Bank (S,B)

University of Michigan

National Bank of Detroit (S,B)

University of Mississippi (2)

Nicholas B. Kronwall Tucson, Arizona(S)

University of Missouri

The Boatmen's National Bank of
 St. Louis (S,B)

University of Nebraska

Omaha National Bank (S,B)

University of Nevada System

1st Interstate Bank (S,B)
 Security National Bank (S,B)
 Nevada National Bank (S,B)

University of North Carolina

Alliance Capital Management (S)
 Reich & Tang (S)
 First Union National Bank (S)
 NCBW Wachovia Bank & Trust (B)

University of Notre Dame

Forstman-Leff-Degnan (B)
 Trust Company of the West (B)
 Brundage, Story & Rose (S)
 Stein, Roe & Farnham (S)
 Capital Guardian Trust Company (S)
 Luther King Capital (S)

University of Pennsylvania

Internally Managed

InstitutionInvestment Managers

University of Pittsburgh

Hoisington (B)
 Mellon Bank (B)
 Pittsburgh National Bank (B)
 Neuberger & Berman (S)
 Brundage, Story & Rose (S)
 Jennison Associates (S)

University of Puget Sound

Pringle, Flinn, Elvins & Donahue (S,B)
 Badgley and Phelps (S,B)

University of Richmond

Capital Guardian Management (S)
 Delaware Investment Advisers (S)
 Pioneering Management Corp. (S)
 Wheat Advisory Services (S)
 Putnam Advisory Services (B)

University of Santa Clara (2)

McCullough & Andrew Inc. (S,B)

University of Scranton

Northeastern Bank of Pennsylvania (S,B)

University of Southern California

Fayez Sarofim & Company (S)
 Western Asset Management Co. (B)

University of Tampa

John M. Blewer, Inc. (S,B)

University of Tennessee
Chattanooga

American National Bank (S,B)
 First Tennessee (S,B)

University of Tennessee (2)
Knoxville

Lionel D. Edie Company (S)

University of Texas System

Fayez-Sarofim (S,B)
 Internally Managed
 Alliance Capital Management (S,B)
 Bernstein-Macaulay (S,B)
 Capital Guardian (S,B)

University of Tulsa

Bank of Oklahoma (S,B)
 First National Bank of Tulsa (S,B)

University of Utah

Internally Managed

University of Vermont

Brundage, Story & Rose (S,B)

University of Virginia

Fayez Sarofim & Company (B)
 General American Investments (S)
 Brundage, Story & Rose (S)
 John W. Bristol (S)
 William A. Hobbs (S,B)
 American National Bank Chattanooga (S,B)
 United Virginia Bank (S,B)

University of Wisconsin System

Heritage Investment Advisors (S,B)
 State of Wisconsin Investment Board

InstitutionInvestment Managers

Vanderbilt University

Starbuck, Tisdale & Williams (B)
 Pacific Investment (B)
 Trust Company of Georgia (B)
 Capital Guardian (S)
 Manufacturers Hanover (S)
 Analytic Investors (S)
 Invesco Capital Management (S)

Vassar College

J.W. Seligman & Company (S,B)

Wake Forest University

Madison Advisors (S,B)
 Century Capital (S,B)
 Montag & Caldwell (S,B)
 Lexington Management Corp. (S,B)
 First Union National Bank (S,B)
 Sterling Management Inc. (S,B)

Washburn College

Hartford National Bank & Trust (S,B)

Washington State University

Smith Barney, Harris Upham & Co. (S,B)
 Old National Bank of Washington (B)

Washington University

Centerre Trust Company (S,B)
 Mercantile Trust Company (S,B)
 Boatmen's National Bank (S,B)
 Scudder, Stevens & Clark (B)
 Thorndike, Doran, Paine & Lewis (S)

Wellesley College

Internally Managed
 Boston Company (S,B)

Wells College

Bank of New York (S,B)

Wentworth Institute of Technology

Standish, Ayer, Wood Inc. (S,B)

Wesleyan University

Lynch & Mayers (S)
 Haleyon Investments (S)
 Brundage, Story & Rose (S)
 Cumberland Partners (S)
 Invesco Capital Management (S)
 Scudder, Stevens & Clark (B)

Western Michigan University Fdn.

Stein, Roe, Farnham (S,B)
 Michigan National Bank (B)

Wheaton College

Bank of New England (S,B)
 Stein Roe & Farnham (S)

Whitman College

Internally Managed

Willamette University

U.S. National Bank of Oregon (S,B)
 Dodge & Cox (S,B)

InstitutionInvestment Managers

Wittenberg University

David L. Babson (S,B)

Worcester Polytechnic Institute

Vilas Fischer Association (S,B)
Shawmut Worcester County Bank (B)

Yale University

Endowment Management & Research (S,B)
Miller, Anderson & Sherrerd (S)
Fischer, Francis, Trees & Watts (B)
Wells Fargo (S)
Connecticut Bank & Trust (S,B)
Lord Abbott (S)

NOTE 1: Internally managed institutions have 80 percent or more of total assets managed internally.

NOTE 2: Institutions which manage at least 50% of total assets internally, but not more than 80% internally.

EXHIBIT VIINDEX OF ENDOWMENT CUSTODIANS (1)

<u>Institution</u>	<u>Custodian</u>
Academy of the New Church	Industrial Valley Bank & Trust
Agnes Scott College	Trust Company of Georgia
Alfred University	U.S. Trust, Lincoln First Bank
Allegheny College	First National Bank-Pennsylvania Mellon Bank
Alma College	Depository Trust Company
American University of Beirut	Chemical Bank
Amherst College	Chase Manhattan Bank U.S. Trust Company
Arizona State University	Northern Trust Company of Arizona
Auburn University	First Alabama Bank of Montgomery American Security Company
Babson College	Brown Brothers Harriman
Baldwin-Wallace College	AmeriTrust Company
Bates College	Depositors Trust Company
Baylor College of Medicine	Bank of the Southwest Baptist Foundation of Texas
Baylor University	Citizens National Bank Baptist Foundation of Texas
Berea College	First Kentucky Trust-Louisville Harris Trust
Berry College	Trust Company of Georgia
Boston University	Boston Safe Deposit & Trust Company Malden Trust Company
Brandeis University	First National Bank of Boston
Brown University	RIHT Corporation, Fleet Financial
Bryant College	RIHT Corporation
Bryn Mawr College	J & W Seligman Fiduciary Trust Neuberger & Berman
Bucknell University	Morgan Guaranty Trust

California Institute of Technology	Security Pacific National Bank
Canisius College	M & T Bank, Buffalo Savings Bank Philadelphia National Bank
Carleton College	Northwestern National Bank of Minneapolis Brown Brothers Harriman
Carnegie-Mellon University	Mellon Bank
Case Western Reserve University	AmeriTrust Central National Bank National City Bank
Chapman College	Internal
Claremont McKenna College	Security Pacific National Bank
Clark University	Guaranty Bank & Trust
Clarkson College of Technology	Lincoln First Bank Marine Midland Bank
Colby College	Depositors Trust Company
Colgate University	Chemical Bank Bessemer Trust First National Bank Bank of New York Cititrust
College of William & Mary	United Virginia Bank
College of Wooster	Bank One Trust Company of Ohio Fiduciary Trust Company of New York
Colorado College	First National Bank of Colorado Springs
Columbia University	Manufacturers Hanover Bank Chemical Bank
Columbia University-Teachers College	Morgan Guaranty Trust Company Connecticut Bank & Trust
Connecticut College	Hartford National Bank & Trust
Cooper Union	United States Trust
Cornell College	Merchants National Bank
Cornell University	Morgan Guaranty Trust Company
Dartmouth College	Chase Manhattan Bank
Davidson College	NCNB Northwestern Bank Wachovia Bank

Denison University	AmeriTrust Company Huntington National Bank National City Bank
Dickinson College	American Bank & Trust Company
Doane College	Hartford National Bank National Bank of Commerce
Drake University	Harris Trust & Savings Bank Iowa Des Moines National Bank
Drew University	Irving Trust Company
Duke University	Morgan Guaranty Trust Company
Earlham College	Second National Bank Richmond, Ind. First National Bank Richmond, Ind.
Eastern Michigan University	Pioneer Fund, Inc.
Endowment Association of the College of William & Mary	United Virginia Bank
Franklin and Marshall College	Hamilton Bank Mercantile Safe Deposit & Trust Co.
Furman University	South Carolina National Bank
George Washington University	Riggs National Bank
Georgetown University	Chase Manhattan Bank Riggs National Bank American Security & Trust
Grinnell College	Bankers Trust
Hamilton College	Irving Trust Company Bank of New York
Hampton Institute	U.S. Trust Company
Harvard University	State Street Bank & Trust Company
Haverford College	U.S. Trust Company Fidelity Bank
Hendrix College	Commercial National Bank
Hope College	Old Kent Bank & Trust First Michigan Bank & Trust
Howard University	Riggs National Bank
Indiana University	Indiana National Bank American Fletcher National Bank Merchants National Bank

Johns Hopkins University	Fiduciary Trust Company of New York First National Bank of Maryland
Kalamazoo College	First National Bank of Boston State Street Bank & Trust Company
Kansas University Endowment Association-Univ of Kansas	Security National Bank
Kenyon College	AmeriTrust Company
Knox College	Northern Trust Company
Lafayette College	Easton National Bank & Trust
Lawrence University of Wisconsin	First Wisconsin Trust Company First National Bank of Appleton Windsor Securities Inc.
Lehigh University	Wilmington Trust Company Morgan Guaranty Trust Company State Street
Loyola University of Chicago	Continental Illinois National Bank & Trust Company of Chicago First National Bank of Chicago Chicago Title & Trust
McGill University	Royal Trust Company Bank of Montreal Trust Company
Marquette University	Marshall & Ilsley Bank
Massachusetts Institute of Technology	First National Bank of Boston
Medical College of Pennsylvania	Cooke & Bieler
Mercer University	Internal
Michigan State University	Detroit Bank & Trust Company Ann Arbor Trust
Middlebury College	Chase Manhattan Bank Bank of New York
Monmouth College	Central Jersey Bank & Trust
Moravian College	First Valley Bank McGlinn Investments
Mount Holyoke College	Scudder, Stevens & Clark
Muhlenberg College	First National Bank of Allentown
Newberry College	South Carolina National Trust First National Bank & Trust

New York University	U.S. Trust Bank of New York
North Carolina State University	Wachovia Bank & Trust
Northwestern University	State National Bank, Evanston Midwest Securities Trust Company
Norwich University	Morgan Guaranty
Oberlin College	National City Bank (Cleveland)
Occidental College	Security Pacific National Bank
Oceans County College	Butcher & Singer
Ohio Northern University	Metropolitan Bank of Lima National City Bank of Cleveland
Ohio State University	BancOhio National Bank Huntington National Bank Neuberger Mutual Fund
Ohio University	Bank One Trust NA of Columbus
Ohio Wesleyan University	Morgan Guaranty
Oregon State Board of Higher Educ.	First Interstate Bank
Otterbein College	BancOhio Robinson Humphrey
Pennsylvania State University	Mellon Bank
Philadelphia College of Pharmacy and Science	Merrill Lynch
Philadelphia College of Textiles and Science	Girard Bank Philadelphia National Bank
Pomona College	Bank of America
Pratt Institute	U.S. Trust Neuberger & Berman William Witter
Princeton University	U.S. Trust Company of New York
Radcliffe College	Fiduciary Trust
Reed College	First Interstate Bank
Rensselaer Polytechnic Institute	Harris Bank Bankers Trust Key Bank NA
Rhode Island School of Design	Rhode Island Hospital Trust Nat'l Bank
Rice University	Texas Commerce Bank

Rochester Institute of Technology	Lincoln First Bank Security Trust Company
Rockefeller University	Chase Manhattan Bank
Rockhurst College	Internal
Rollins College	Scudder, Stevens & Clark Barnett Bank of Winter Park Trust Company of Florida ComBank of Winter Park First National Bank of Chicago
Russell Sage College	State Bank of Albany Marine Midland Bank
Rutgers, The State University	Chemical Bank of New York
St. Louis University	Centerre Trust Company
St. Mary's College	American National Bank First Source Bank St. Joseph Bank National Bank
St. Norbert College	Citizens Bank & Sheboygan Harris Trust & Savings Bank, Chicago Kellogg Citizens
Simmons College	Bank of New England
Skidmore College	Shearson American Express Value Line Asset Management Lincoln First Bank Thomson McKinnon
Smith College	Morgan Guaranty Trust Company Bank of New York Kidder Peabody U.S. Trust Company
Southern Methodist University	First National Bank-Dallas
Southwestern at Memphis	Union Planters National Bank of Commerce First National Bank, Mobil First Tennessee Bank
Southwestern University	First City National Bank
Spelman College	Chase Manhattan Bank
Stanford University	Wells Fargo Bank Chase Manhattan Bank

State University of New York

Sweet Briar College

Syracuse University

Temple University

Thomas Jefferson University

Trinity College (Conn.)

Trinity College (Wash., D.C.)

Tulane University

University of Akron

University of Alabama System

University of Arizona

University of Arkansas

University of Chicago

University of Cincinnati

University of Connecticut

University of Dayton

University of Delaware

University of Denver

University of Evansville

University of Houston System

University of Iowa Foundation

University of Maine

Manufacturers & Traders Trust Co.
Marine Midland Bank

United Virginia Bank

Key Bank of Central New York

Girard Bank

First Pennsylvania Bank N.A.

Hartford National Bank & Trust Co.

American Security Bank

Hibernia National Bank
First National Bank of Commerce

First National Bank of Akron
BancOhio
National City Bank of Akron

First National Bank of Tuscaloosa

First Interstate Bank

Stephens, Inc.
First National Bank-Little Rock

Morgan Guaranty

First Third Bank-Cincinnati

State Treasurer
Connecticut Bank & Trust

Third National Bank & Trust Company

Wilmington Trust Company
Bank of Delaware

United Bank of Denver
Intrawest Bank of Denver
Colorado National Bank
Mountain States Bank
Central Bank & Trust

Internal

Texas Commerce Bank

Shawmut Bank

Merrill Trust Company
Maine National Bank

University of Maryland	Union Trust Company of Maryland Treasurer of State
University of Massachusetts	Internal
University of Miami	Security Trust Company Southeast Bank
University of Michigan	National Bank of Detroit Detroit Bank & Trust Company
University of Mississippi	Deposit Guaranty National Bank, Jackson First National Bank-Jackson
University of Missouri	The Boatmen's National Bank State of Missouri
University of Nebraska	Omaha National Bank
University of Nevada System	First Interstate Bank Security National Bank Nevada National Bank
University of North Carolina	Wachovia Bank & Trust NCNB
University of Notre Dame	Chicago Title Chase Manhattan Bank
University of Pennsylvania	Fidelity Bank
University of Pittsburgh	Mellon Bank Pittsburgh National Bank
University of Puget Sound	Puget Sound National Bank
University of Richmond	Central Fidelity Bank First & Merchants National Bank
University of Santa Clara	Barclays Bank of California
University of Scranton	Northeastern Bank
University of Southern California	First Interstate Bank of California
University of Tampa	Exchange Bank & Trust Company
University of Tennessee at Chattanooga	American National Bank First Tennessee
University of Tennessee at Knoxville	United American Bank, Knoxville
University of Texas System	Internal, State Treasurer

University of Tulsa	Bank of Oklahoma First National Bank of Tulsa
University of Utah	First Security Bank
University of Vermont	First National Bank of Boston
University of Virginia	Harris Bank & Trust Fiduciary Trust Company of New York United Virginia Bank American National Bank of Chattanooga
University of Wisconsin System	Treasurer of the State Morgan Guaranty Trust
Vanderbilt University	First American Bank Chase Manhattan Bank Trust Company of Georgia
Vassar College	J & W Seligman & Company
Wake Forest University	Wachovia Bank & Trust Company First Union National Bank
Washburn College	Hartford National Bank & Trust Co.
Washington State Univ	Smith Barney Harris Upham & Company Old National Bank of Washington
Washington University	St. Louis Union Trust Company Mercantile Trust Company Boatmen's National Bank First National Bank DTC
Wellesley College	State Street Bank & Trust
Wells College	Bank of New York
Wentworth Institute of Technology	Boston Safe Deposit & Trust Company
Wesleyan University	U.S. Trust Company
Western Michigan University	Michigan National Bank
Wheaton College	Bank of New England
Whitman College	Internal
Willamette College	U.S. Bank of Oregon
Wittenberg University	Internal
Worcester Polytechnic Institute	Mechanics Bank Shawmut Worcester County Bank Guaranty Bank & Trust

Yale University

Chemical Bank
Connecticut Bank & Trust

NOTE 1: Internal means an institution serves as custodian for at least 80 percent of its assets.

APPENDIX I

EXPLANATION OF METHOD USED FOR MEASURINGPERFORMANCE OF PORTFOLIO MANAGER

The choice between the geometric average return (average total return) figure and the internal rate of return figure depends on what it is one wishes to measure: the skill of the individual or committee which actually manages the investment of the endowment fund, or the success of the investment management coupled with the decision or policy that governs withdrawal of funds from the endowment (and contribution of funds to the endowment). Both figures are "correct," but the internal rate of return should not be used for judging portfolio management, nor should the geometric average not be used for judging the overall results of portfolio management and decisions on when to add the withdraw funds.

For most endowment funds the geometric average is probably the more important figure. This is particularly true if additions of funds to an endowment and withdrawals of funds do not reflect any judgment skill, but simply follow a policy of adding funds when contributions are received and withdrawing income either when the dividends and interest are received or at predetermined dates. The reason for looking at the internal rate of return in addition to the geometric average is to determine how well the investor is timing additions and withdrawals.

College officials often object to the use of the geometric average, protesting that: "This average assumes that income is reinvested, and we don't reinvest income." It is quite true that they do not reinvest income, but if what is to be determined is the quality of investment performance being achieved by the manager of the endowment fund, then the performance record of the manager should not be penalized by unfortunate timing of withdrawals over which the manager has no control.

APPENDIX II

PERFORMANCE OF POOLED INVESTMENT FUNDSEXPLANATION OF COMPUTATIONS

The computations required to create the tabular and performance data used in the comparative performance of pooled investment funds are accomplished by a computer program entitled FUNDPER. The program FUNDPER draws on the basic data file compiled for each individual investment pool. Data contain the endowment pool's year-end unit value (at market) and the dollar value per unit of income received for the year. Drawing on the basic file, FUNDPER first creates a yearly chart of tabulated data as shown below; for any number of consecutive years within the limits of the basic data file it calculates various performance statistics.

STATISTICAL SUMMARY SHEET

INSTITUTIONAL CODE NAME - SP500

COL 1 YEAR	COL 2 BASE	COL 3 UNIT	COL 4 APPRE	COL 5 INCOME	COL 6 YLD PCT	COL 7 GRO PCT	COL 8 TOT RET PCT
1977	100	100.48					
1978	95.07	95.53	-4.95	4.91	4.89	-4.93	-0.04
1979	102.42	102.91	7.38	5.34	5.59	7.73	13.32
1980	113.69	114.24	11.33	5.94	5.77	11.01	16.78
1981	130.61	131.24	17	6.39	5.59	14.88	20.47
1982	109.09	109.61	-21.63	6.81	5.19	-16.48	-11.29
ARITH AVGS 5 YRS ENDING IN 1982					5.41	2.44	7.85
GEOM AVGS					5.41	1.75	7.17
APPRECIATION						9.09 PERCENT	
CORRESPONDING AVG ROR						1.75 PERCENT	
APPREC WITH INC REINV						41.52 PERCENT	
CORRESPONDING AVG ROR(AV T/R)						7.19 PERCENT	

Exhibit A contains examples of the mathematics used by FUNDPER for that portion of the tabulated data which is computed. The balance of the tabulated data is reproduced from the basic data file.

An explanation of the columns for 1982 in the above chart is as follows:

Col. 1 Fiscal Year: July 1/June 30.

Col. 2 Base: This gives the first year the unit value is available an index of 100 and adjusts the succeeding unit values accordingly. In the above example the first year the S&P 500 unit value figures were available was the fiscal year ending 6/30/77.

Col. 3 Unit Value: Supplied by participating institution.

Col. 4 Appreciation: Appreciation is computed by subtracting the 1981 unit value from the 1982 unit value.

Col. 5 Income Per Unit: Supplied by participating institution.

Col. 6 Yield Percent: Yield percent is computed by taking the 1982 income per unit, dividing it by the 1981 unit value, and multiplying by 100.

Col. 7 Growth Percent: Growth percent is computed by taking the 1982 appreciation, dividing it by the 1981 unit value, and multiplying by 100.

Col. 8 Total Return Percent: Total return percent is computed by adding the 1982 appreciation to 1982 income, then dividing by the 1981 unit value, and multiplying by 100.

Exhibit B contains examples of the mathematics used by FUNDPER in determining arithmetic and geometric averages of yield, growth, and total return for the period specified. They are computed as follows:

1. Arithmetic Average 5 Years Ending 1982: Add either the 5 yearly yield, growth, or total return percentages and divide by 5.
2. Geometric Average 5 Years Ending 1982: Add one to each of the 5 yearly yield, growth, or total return percentages expressed as a decimal, multiply these figures, then take the fifth root of that value, subtract 1, and multiply by 100.

Exhibit C contains examples of the mathematics used by FUNDPER in making comparative performance computations. Using the five-year period 1977-82 as an example, the four comparative performance percentages are computed as follows:

1. Total Percent Appreciation: The total percent appreciation is computed by dividing the 1982 unit value by the 1977 unit value, subtracting 1, and multiplying by 100.
2. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric growth rate is computed by taking the fifth root of the 1982 unit value divided by the 1977 unit value, subtracting 1, and multiplying by 100.
3. Total Percent Appreciation with Income Reinvested: The total percent appreciation with income reinvested is calculated as follows:
 - a. Determining the number of units that could have been purchased with income of one unit for the year 1977-78, using the average of the 1977 and 1978 unit values as the price of a new unit.
 - b. Adding the new units so purchased to the original unit held.

- c. Determining the income on the new total units held for the next year 1978-79 calculating the number of units that could have been purchased with income in that year, again using the average beginning and end of year unit values as the price of new units, and so on to the end of the five years, i.e., the end of 1982.
 - d. Calculating the total value of the units held as of 1982 multiplied by the 1982 unit value, and dividing this by the 1977 unit value, subtracting 1, and multiplying by 100.
4. Corresponding Annual Geometric Average Growth Rate: The corresponding annual geometric average growth rate (with income reinvested) is computed by adding 1 to the total of the units purchased during each of the five years, multiplied by the unit value at the end of 1982 divided by the 1977 unit value, taking the fifth root, subtracting 1, and multiplying by 100.

EXHIBIT A (Appendix II)Tabulated Data Computations

Col. 4 Appreciation

$$\begin{aligned} & 1982 \text{ Unit Value} - 1981 \text{ Unit Value} \\ & 109.61 - 131.24 = -21.63 \end{aligned}$$

Col. 6 Yield Percent

$$\begin{aligned} & (1982 \text{ Income}/1981 \text{ Unit Value}) \times 100 \\ & (6.81/131.24) \times 100 = 5.19\% \end{aligned}$$

Col. 7 Growth Percentage

$$\begin{aligned} & (1982 \text{ Appreciation}/1981 \text{ Unit Value}) \times 100 \\ & (-21.63/131.24) \times 100 = -16.48\% \end{aligned}$$

Col. 8 Total Return Percent

$$\begin{aligned} & (1982 \text{ Appreciation} + 1981 \text{ Income})/1981 \text{ Unit Value} \times 100 \\ & [(-21.63 + 6.81)/131.24] \times 100 = -11.29\% \end{aligned}$$

Exhibit B (Appendix II)Arithmetic and Geometric Averages

Arithmetic Average Total Return Percentage*

$$(Total \text{ Return Percentage for } 1977-78 + 1978-79 + 1979-80 + 1980-81 + 1981-82)/5$$

$$\frac{(-.04) + 13.32 + 16.78 + 20.47 + (-11.29)}{5} = 7.85\% \text{ for 5 years ending June 30, 1982}$$

Geometric Average Total Return Percentage*

$$\left(\frac{Total \text{ Return for } (1977-78 + 1) \times (1978-79 + 1) \times (1979-80 + 1) \times (1980-81 + 1) \times (1981-82 + 1)}{(1/5) - 1} \right) \times 100$$

$$\left(\frac{(-.0004 + 1) \times (.1332 + 1) \times (.1678 + 1) \times (.2047 + 1) \times (-.1129 + 1)}{(1/5) - 1} \right) \times 100 = 7.17\%$$

*NOTE: Average yield and growth percentages are calculated in the same manner.

EXHIBIT C (Appendix II)

Comparative Performance Measurement Computations

1. Total Return Appreciation

$$\left(\frac{(1982 \text{ Unit Value})}{(1977 \text{ Unit Value})} - 1 \right) \times 100$$

$$\left(\frac{(109.61)}{(100.48)} - 1 \right) \times 100 = 9.09\%$$

2. Corresponding Annual Geometric Average Growth Rate Percentage

$$\left(\frac{(1982 \text{ Unit Value})}{(1977 \text{ Unit Value})} \right)^{(1/5)} - 1 \quad \times \quad 100$$

$$\left(\frac{(109.61)}{(100.48)} \right)^{(1/5)} - 1 \quad \times \quad 100 = 1.75\%$$

3. Total Percent Appreciation with Income Reinvested

$$\frac{(1978 \text{ Income})}{\text{Average of 1977 and 1978 Unit Values}} = \text{Units Purchased with 1978 Income}$$

$$\frac{4.91}{(100.48 + 95.53)/2} = .05010 \text{ Units}$$

$$\frac{(1 + \text{Units Purchased with 1978 Income}) \times 1979 \text{ Income Per Unit}}{\text{Average of 1978 and 1979 Unit Values}} = \text{Units Purchased with 1979 Income}$$

$$\frac{(1 + .05010) \times 5.34}{(95.53 + 102.91)/2} = .05652$$

Exhibit C (Appendix II) -- Continued

1 + Units Purchased with 1978 + 1979 Income) X 1980 Income Per Unit = Units Purchased with 1980 Income

Average of 1979 and 1980 Unit Values

$$\frac{(1 + .05010 + .05652) \times 5.94}{(102.91 + 114.24)/2} = .06054 \text{ Units}$$

1 + Units Purchased with 1978 + 1979 + 1980 Income) X 1981 Income Per Unit = Units Purchased with 1981 Income

Average of 1980 and 1981 Unit Values

$$\frac{(1 + .05010 + .05652 + .06054) \times 6.39}{(114.24 + 131.24)/2} = .06076 \text{ Units}$$

1 + Units Purchased with 1978 + 1979 + 1980 + 1981 Income) X 1982 Income Per Unit = Units Purchased with 1982 Income

Average of 1981 and 1982 Unit Value

$$\frac{(1 + .05010 + .05652 + .06054 + .06076) \times 6.81}{(131.24 + 109.61)/2} = .06944 \text{ Units}$$

$$\left[\frac{(1 + \text{Units Purchased with 1978} + 1979 + 1980 + 1981 + 1982 \text{ Income}) \times 1982 \text{ Unit Value}}{1977 \text{ Unit Value}} - 1 \right] \times 100 = \text{Appreciation with Income Reinvested}$$

$$\left(\frac{(1 \times .05010 + .05652 + .06054 + .06076 + .06944) \times 109.61}{100.48} - 1 \right) \times 100 = 41.52\% \text{ Appreciation with Income Reinvested}$$

4. Corresponding Annual Geometric Growth Rate

$$\left[\frac{(1 + \text{Total of Income Units Purchased from 1978 thru 1982}) \times 1982 \text{ Unit Value}}{1977 \text{ Unit Value}} - 1 \right] \times 100 = \text{Av T/R}$$

$$\left(\frac{(1 + .05010 + .05652 + .06054 + .06076 + .06944) \times 109.61}{100.48} - 1 \right) \times 100 = 7.19\% \text{ Corresponding Average ROR (AV T/R)}$$

APPENDIX III

NACUBO
INVESTMENT QUESTIONNAIRE

Terms and Definitions

Responses to the questionnaire should be prepared with reference to terms and definitions contained in the following glossary:

1. Endowment and Other Funds. Endowment and other funds held on a permanent or semi-permanent basis are of two kinds, "endowment" and "quasi-endowment," which are defined as follows (Ref: College and University Business Administration):
 - a. Endowment funds are those for which donors or other external agencies have stipulated under the terms of the gift instrument creating the fund that the principal of the fund is not expendable—that is, it is to remain inviolate in perpetuity and is to be invested for the purpose of producing present and future income, which may be expended or added to principal.
 - b. Term endowment funds are like endowment funds, except that all or part of the principal may be utilized after a stated period of time or upon the occurrence of a certain event.
 - c. Quasi-endowment funds (funds functioning as endowment) are funds that the governing board of the institution, rather than a donor or other external agency, has determined are to be retained and invested. Since these funds are not required by the donor to be retained and invested, the principal as well as the income may be totally utilized at the discretion of the governing board, subject to any donor-imposed restrictions on use.
 - d. Life income funds are assets, the income of which does not flow through to the institution during the lifetime of the donor or beneficiary, yet the principal of which has been designated to the institution as a remainderman.

NOTE: The above definitions should be kept clearly in mind in answering the questionnaire. It might be helpful to think of endowment funds as true endowment funds as distinguished from quasi-endowment funds which really have no characteristics of true endowment funds except they are retained and invested on a long-term basis. In particular, the terms restricted and unrestricted should not be used to distinguish between an endowment fund and a quasi-endowment fund. These terms are more applicable to the use of the income and/or principal of the funds. For example, a true endowment fund may be unrestricted as to the use of income so that such income may be used for any institutional purpose, while another endowment fund may have its income restricted to a particular use such as the purchase of library books. On the other hand one quasi-endowment fund may be completely unrestricted both as to the use of principal and income, while another quasi-endowment fund may be restricted in that its principal and income if expended at all must be expended for a designated purpose, as for example payment of faculty salaries.

2. Yield consists of the annual dividends, interest, rent, and other forms of ordinary income expressed as a percentage of the average beginning and ending total market value of investments in the endowment fund pool. Thus, "yield" represents what is ordinarily regarded as income, but for the purposes of the total return concept, since appreciation used for current operating purposes may under some definitions be treated as "income," the more precise definition of "yield" is preferable.
3. Appreciation (Depreciation) means enhancement in value of the investments in the portfolio. This may be either realized or unrealized. Unrealized appreciation can always be converted into realized if necessary. Correspondingly depreciation means a shrinkage in market value, again realized or unrealized. In the Yale terminology the word "gain" is used instead of appreciation. This has the advantage of being a shorter word but it also may carry an implication of realizing the appreciation, which is not necessary.
4. Total Return means the total of yield plus appreciation (or minus depreciation) expressed as a percentage of the average beginning and ending market value of the funds for a given year.
5. Utilizable portion of total return is the percentage of the averaged beginning and ending total market value of an institution's total return funds which will be used for current operating purposes. In a given year the total return rate might be 8%, 10%, 12%, or something else, but in most cases only a portion of this will be used for current operations and designated the utilizable portion of total return.
6. Unit value is determined by a periodic evaluation of the total market value of pooled fund investments divided by the number of units in the pool.
7. Unit yield is the amount of annual dollar yield per unit in the pool, traditionally dividends, interest, rent, etc., exclusive of any realized or unrealized appreciation.
8. Historical book value is interpreted to mean the value of endowment funds exclusive of the investment gains and losses which have been added to such funds. Thus, historical book includes not only the original gift or bequest which establishes a fund, but also any subsequent additional gifts or bequests, income added to the principal of the fund, increases in cash surrender value of life insurance policies, and most transfers in or out of the Fund.
9. Equities are any common stock, convertible preferred stock, or convertible debenture.
10. Senior Securities are any non-convertible preferred stock or non-convertible debenture whose maturity is one year or greater.
11. Cash Equivalent is any asset whose maturity is under one year.

12. Current Funds Revenues. Current funds revenues include (1) all unrestricted gifts, grants, and other resources earned during the reporting period and (2) restricted resources to the extent that such funds were expended. Current funds revenues do not include restricted current funds received but not expended or resources that are restricted by external persons or agencies to other than current funds.
13. Current Funds Expenditures. Current funds expenditures represent the costs incurred for goods and services used in the conduct of the institution's operations. They include the acquisition cost of capital assets, such as equipment and library books, to the extent current funds are budgeted for and used by operating departments for such purposes.

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